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Catalogue of the Annelida collected by the IN2021_V04 and IN2022_V08 expeditions to the Australian Christmas Island and Cocos (Keeling) Islands Territories

Elena K. Kupriyanova[1,2,6], Alexander Haddad[2], Rafaela Gurgel[3], Christopher J. Glasby[1,4,7], Patricia A. Hutchings[1,2,8], Anna Murray[1,9], Hannelore Paxton[2,1,10], & Robin S. Wilson[5,11]

[1]Australian Museum Research Institute, 1 William Street, Sydney, New South Wales 2010, Australia
[2]School of Natural Sciences, Macquarie University, Sydney, New South Wales 2109 Australia
[3]School of Life and Environmental Sciences, University of Sydney, Sydney, New South Wales 2006, Australia
[4]Museum and Art Gallery Northern Territory, GPO Box 4646, Darwin, Northern Territory 0801, Australia
[5]Museums Victoria, GPO Box 666, Melbourne, Victoria 3001, Australia
[6][Elena.Kupriyanova@Australian.Museum] https://orcid.org/0000-0003-0336-4718
[7]https://orcid.org/0000-0002-9464-1938
[8]https://orcid.org/0000-0001-7521-3930
[9]https://orcid.org/0000-0002-1765-1286
[10]https://orcid.org/0000-0001-7086-5219
[11]https://orcid.org/0000-0002-9441-2131

Abstract In this catalogue, 54 Annelida OTUs collected by the IN2021_V04 and IN2022_V08 expeditions to the Australian Christmas Island and Cocos (Keeling) Islands Territories are diagnosed and illustrated.

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Figure 1. *Paralamprophaea* cf. *crosnieri*. See page 12.

Contents

Introduction 2

Methods 2

Results 3

Systematic account 4
Family Ampharetidae . . . 4
Family Amphinomidae . . . 5
Family Aphroditidae . . . 5
Family Eunicidae . . . 8
Family Glyceridae . . . 10
Family Hesionidae . . . 11
Family Iphionidae . . . 13
Family Melinnidae . . . 14
Family Nephtyidae . . . 16
Family Nereididae . . . 18
Family Onuphidae . . . 21
Family Opheliidae . . . 26
Family Polynoidae . . . 28
Family Serpulidae . . . 41
Family Terebellidae . . . 53

Acknowledgements 58

References 59

Family index 61

Species index 62

Appendix - Annelida from voyages IN2021_V04 and IN2022_V08 to the Australian Christmas Island and Cocos (Keeling) Islands Territories 63

Introduction

This catalogue is based on examination of Annelida collected during the "Investigating the IOT" campaign (voyages IN2021_V04 and IN2022_V08; O'Hara, 2024) to the Australian Christmas Island and Cocos (Keeling) Islands Territories—Australia's Indian Ocean Territories (IOT). Our objectives were a preliminary assessment of the annelid fauna collected, sufficient to make material known to relevant taxonomists undertaking future taxonomic revisions. Since these samples represent the first systematic sampling of these depths in this region of the Indian Ocean, we expect that a significant fraction of the annelid worms encountered will eventually be shown to represent undescribed species. Several new species (families Aphroditidae and Serpulidae) have already been described (Flaxman & Kupriyanova, 2024; Kupriyanova & Flaxman, 2024).

Methods

Station details and collection methods are described in O'Hara (2024).

After initial family-level rough sorting, specimens were assigned to morpho-species operational taxonomic units (OTU) and where the condition of specimens and available taxonomic expertise allowed, assigned to genera. The resulting OTUs were assigned to named species where possible, with others determined in open nomenclature following Sigovini *et al.* (2016) or allocated to numbered OTUs. OTUs are briefly described and where possible illustrated in the systematic account.

Small specimens (< 2 cm) were photographed using a Tucsen MIchrome 20MP USB.3.0 camera mounted on an Olympus SZX7 stereomicroscope fitted with an Olympus U-TV1XC mount. Larger specimens (> 2 cm) were examined under a Canon EOS 5D Mk IV

collection method	number of operations	number of specimens	number of taxa
4 m beam trawl	60	626	64
Gandalf net	41	203	27
Sherman sled	11	38	13
Total	112	867	104

Table 1. IOT Annelids by collection method, voyages IN2021_V04 and IN2022_V08 combined; "taxa" includes species, OTUs with undifferentiated families counted as a single OTU.

fitted with a Canon EF 100 mm Image Stabilizer lens. This camera setup was then mounted and operated by a P51 Camlift Controller and was illuminated with a Microptics ML-1000 illuminator and a ProSciTech XGY-II halogen lamp. Specimens were photographed without staining and stained in a methylene blue solution to highlight complex or cryptic morphological characters.

DNA sequences have been obtained for several species (Flaxman & Kupriyanova, 2024; Kupriyanova & Flaxman, 2024; Rouse *et al.*, 2024, see below). Not all specimens were determinable to species/OTU but a complete list of all material is provided in the Appendix.

Results

Objectives and sampling methods from the two IOT voyages were not aimed at representative sampling of benthic infauna and epifauna in the size fractions of most annelid species, nevertheless 440 annelid specimen lots (≈867 specimens) were collected, representing 34 families. In the Systematic Account below we treat 54 OTUs that could be diagnosed; an additional 50 incompletely determined families and genera were present, so that the annelid diversity from these samples is conservatively estimated at 104 "taxa" which are counted in Table 1. The Appendix is a complete list.

Three collection methods (4 m beam trawl, Gandalf net, Sherman sled) resulted in annelid collections and their relative success is summarised in Table 1. The Gandalf net was was mounted on the beam trawl, but not for all operations (see O'Hara (2024) for more details). The Gandalf net collected about half as many specimens and taxa as the beam trawl (from fewer operations). The Gandalf samples included many extremely small and damaged specimens. If expressed as taxa per operation, the beam trawl and the Sherman sled were about equally successful (actually, equally unsuccessful—none of these methods has sampled annelids effectively). Although this was a choice made based on voyage objectives and post-voyage resources (O'Hara, 2024), it is notable that numerous annelid families that are normally abundant and species rich in benthic samples are absent from these samples (*eg* Capitellidae, Cirratulidae, Dorvilleidae, Orbiniidae, Spionidae) while many other common annelid families are scarcely represented. Perhaps only those taxa which often reach larger sizes (Aphroditidae, Polynoidae) or are attached to larger substrate objects (Serpulidae) have begun to be sampled representatively.

Systematic account

Family Ampharetidae

Ampharetidae gen. and sp. nov.

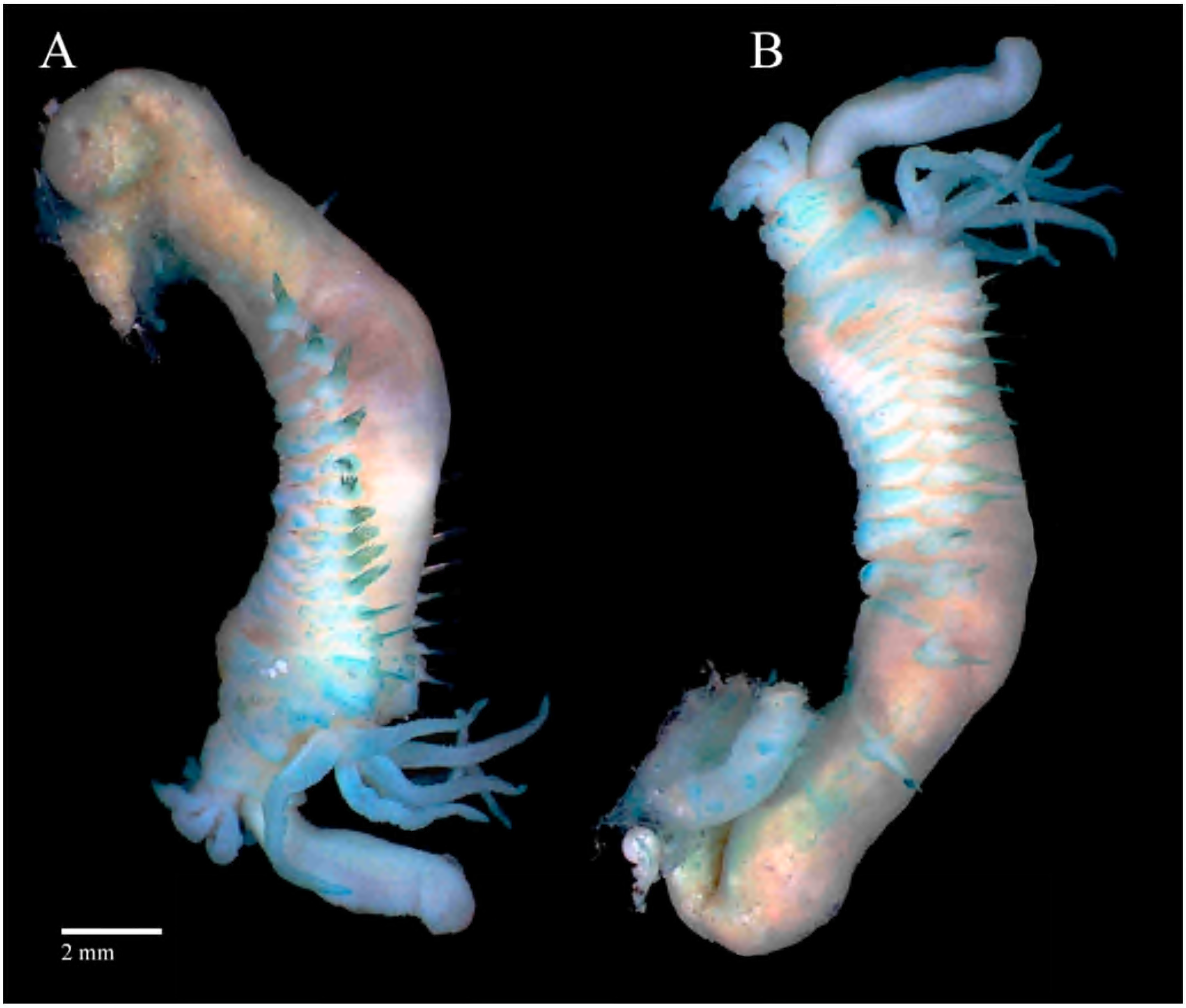

Figure 2. Ampharetidae gen. et sp. nov. AM W.54431 (Op 147) entire animal stained, (A) left lateral, (B) right lateral.

Description of IOT material Four pairs of smooth branchiae. One buccal tentacle modified and considerably enlarged and smooth (it may, however, be an ovisac of a copepod) . Paleae absent. 15 pairs of notopodia. Nuchal hooks absent. 13 uncinigerous thoracic segments.

Taxonomic remarks An incomplete specimen, with only thoracic segments. There is a large number of genera (>70) within this family, although many are monotypic and poorly known. However, no currently known genus has been described with a single enlarged buccal tentacle. The specimen is also not very well preserved so describing a new genus will be difficult as some important diagnostic characters are lacking.

Distribution Only known from Cocos (Keeling) Islands, Indian Ocean Territories, Noel Seamount, 2617–2721 m.

Ecology and life history All ampharetids are surface deposit feeders collecting food particles from the substrate surface using their buccal tentacles. They construct fragile tubes of mud or sometimes sand grains. All known species have large eggs (130–240 µm in diameter) indicative of non-feeding larval development (Marshall *et al.*, 2012).

Family Amphinomidae

***Eurythoe* sp. 1**

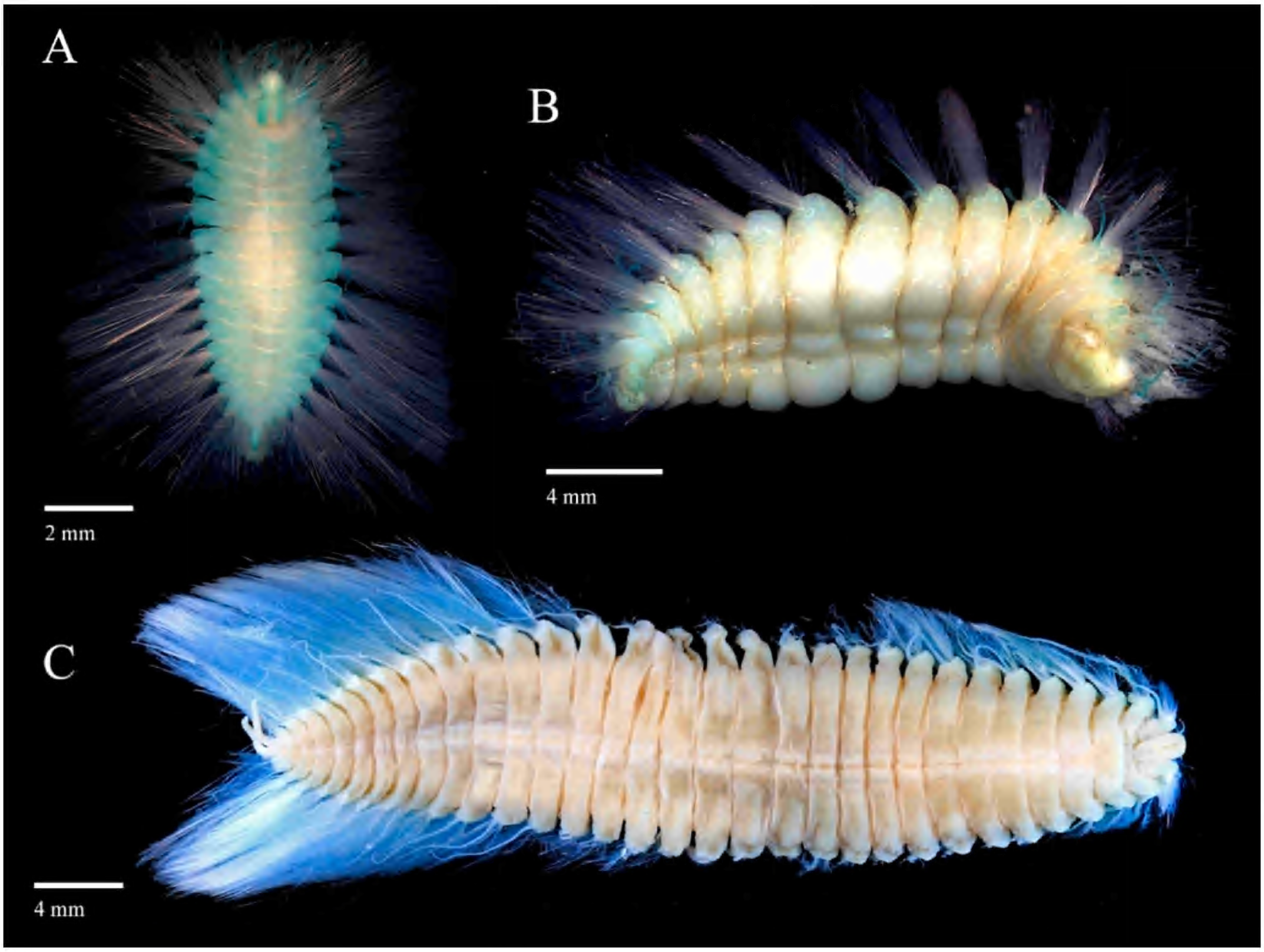

Figure 3. *Eurythoe* sp. 1 (A-C) entire animals stained, ventral, (A) AM W.53491 (Op 048), (B) AM W.54617 (Op 161), (C) AM W.54491 (Op 028).

Diagnosis Body elongate. Prostomium large with two pairs of palps, three antennae, and a pair of palps. Caruncle long, narrow, with numerous lateral folds. Parapodia with notopodium and neuropodium well separated with numerous long chaetae. Branchiae from chaetiger 2 and then on all subsequent chaetigers as single branching tufts. Chaetae long and cream coloured covering dorsum. Caruncle darkly pigmented with numerous compact lateral folds.

Taxonomic remarks In total, 17 species are currently known in the genus world-wide, but others have been synonymized with the widely reported type species *E. complanata* Pallas, 1766 which represents a species complex. No species of *Eurythoe* have been recorded from deep water around Australia and these specimens likely belong to an undescribed species. A taxonomic revision of this genus is required.

Distribution Only known from Indian Ocean, Territory of Christmas Island, Balthazar Seamount and Cocos (Keeling) Islands Territory, Muirfield Seamount, 1260–1347 m.

Ecology and life history Unknown.

Family Aphroditidae

Laetmonice n. sp. 1

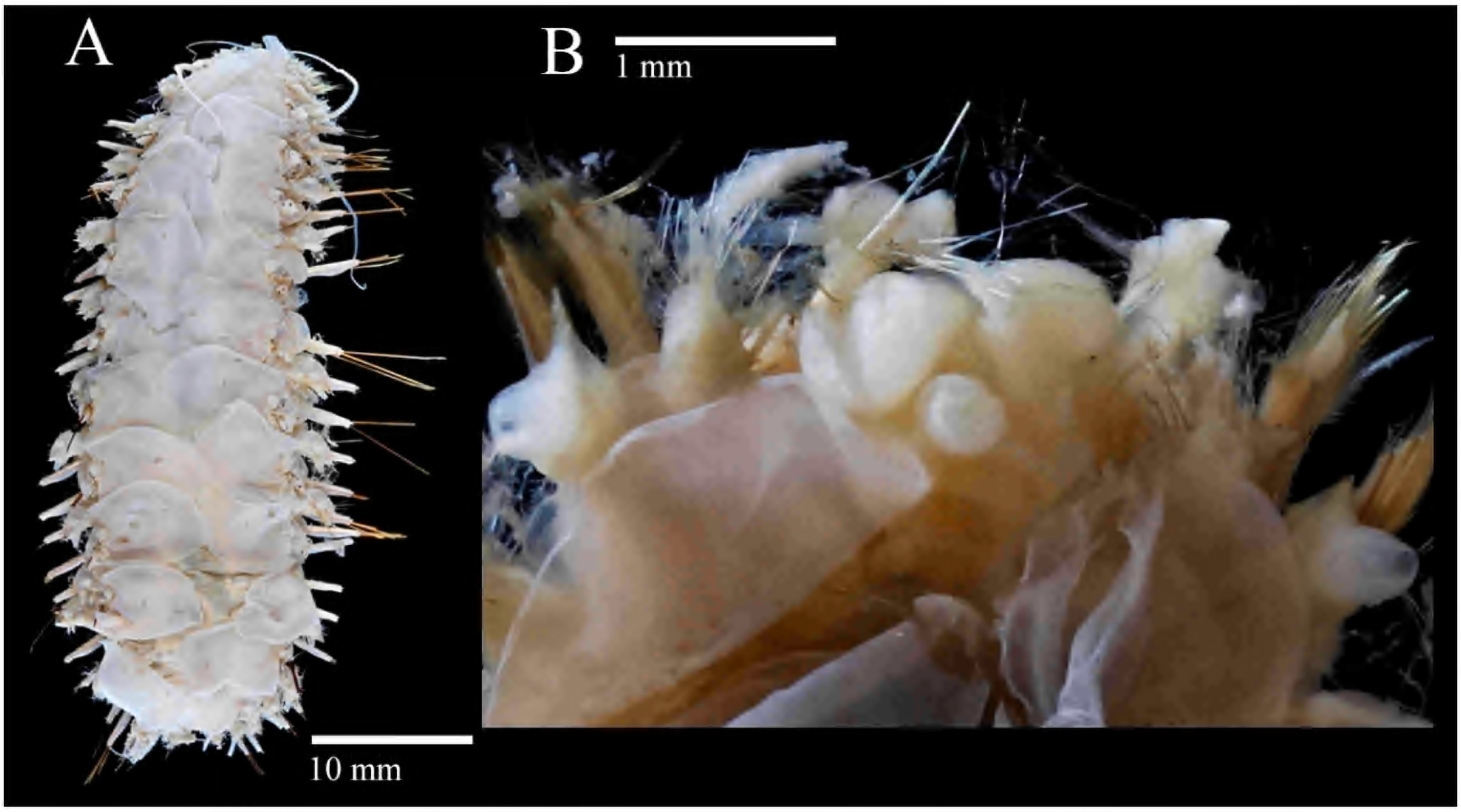

Figure 4. *Laetmonice* n. sp. 1. AM W.53946 (Op 056) (A) entire animal, dorsal (B) prostomium, dorsal.

Diagnosis Body dorsoventrally flattened; about 28 to 34 segments. Prostomium globular, with median antenna and one pair of stalked eyes; papillate facial tubercle present, situated below base of palps. Elytra 14 to 15 pairs on segments 2, 4, 5, 7 to 25, then on every third segment. Elytra not covered by dorsal felt. Harpoon-shaped notochaetae present.

Taxonomic remarks Laetmonice n. sp. 1 is most similar to *Laetmonice yarramba* Hutchings & McRae, 1993 (the name most commonly used for Australian species of the genus *Laetmonice*) given the character combination of 28–34 segments, 14–15 elytra pairs, absence of dorsal felt and 3–4 neurochaetae with fringe of hairs. This species is distinct due to the large ocular peduncles (1/2 length of prostomium), location of median antenna posterior to ocular peduncles and long palp length, extending to segment 15. The species will be described in Flaxman & Kupriyanova (2024).

Distribution The Great Australian Bight and the Eastern Australian Abyss from off Tasmania (41° S) up to Fraser Island (25° S). IOT (1010–3096 m).

Ecology and life history Epibenthic predators.

***Laetmonice* n. sp. 2**

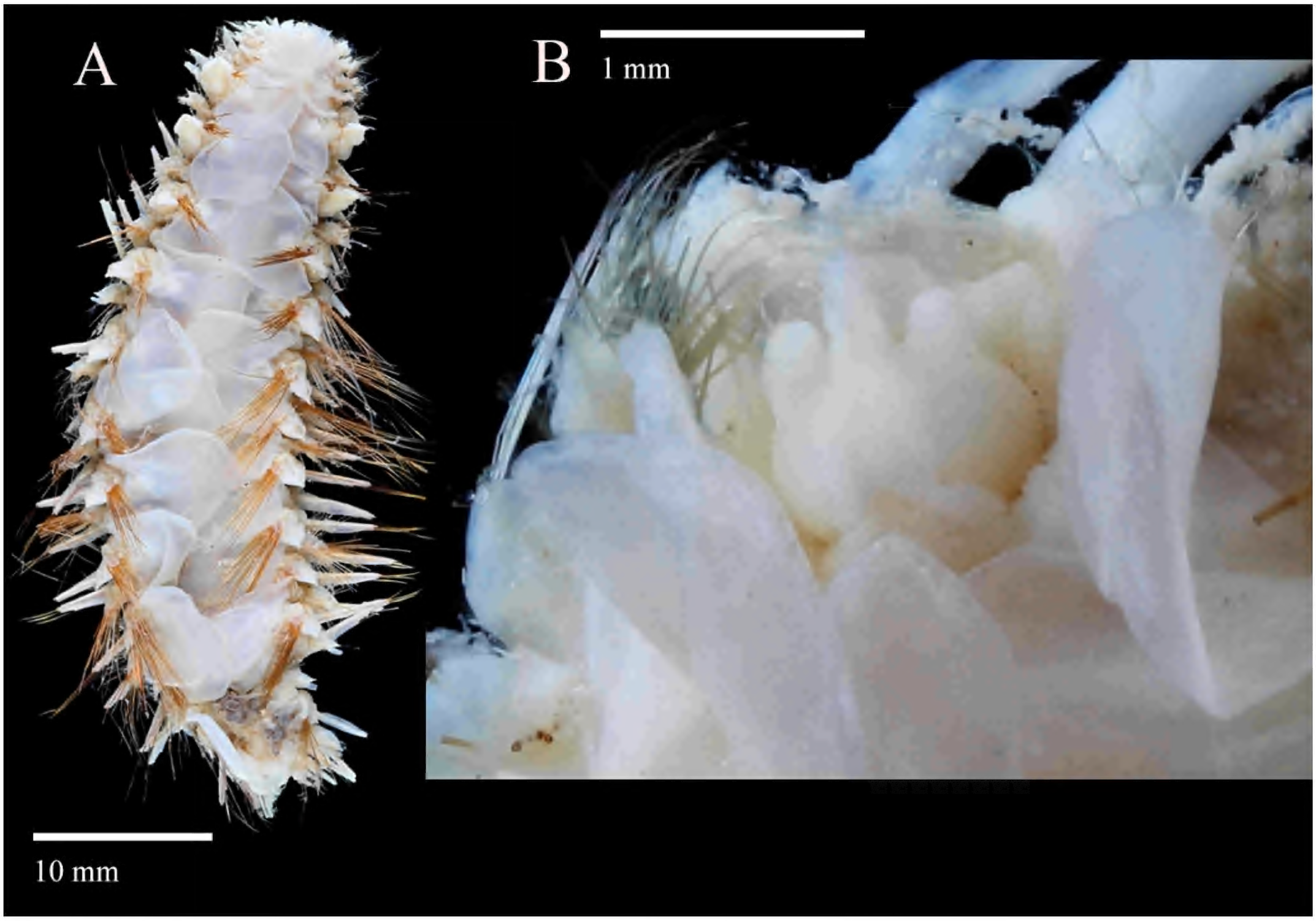

Figure 5. *Laetmonice* n. sp. 2. (A) AM W. 54337 (Op 115) entire animal, dorsal (B) AM W.53970 (Op 115) prostomium, dorsal.

Diagnosis Body dorsoventrally flattened; up 34 segments. Prostomium globular, with median antenna and a pair of stalked eyes; papillate facial tubercle situated below base of palps. Long palps extending to segment 13. Prostomium with distinctly small ocular peduncles (1/3 length of prostomium) and the median antenna located between them. Elytra 14–15 pairs on segments 2, 4, 5, 7 to 25, then on every third segment. Elytra not covered by dorsal felt. Harpoon-shaped notochaetae present.

Taxonomic remarks The species is similar to *Laetmonice yarramba* (the name most commonly used for Australian species of the genus *Laetmonice*) by the character combination of 32–34 segments, 14–15 elytra pairs, absence of dorsal felt and 3–4 neurochaetae with fringe of hairs and to *Laetmonice* n. sp. 1 as both show long palps extending to segment 13. However, the species is different in the prostomium features as it has distinctly small ocular peduncles (1/3 length of prostomium) and the median antenna located between them. The species will be described in Flaxman & Kupriyanova (2024).

Distribution The Great Australian Bight and the Eastern abyss from off Tasmania (40° S) up to Bermagui, NSW (36° S). Off West of Australia. IOT (2760–5000 m).

Ecology and life history Unknown.

***Laetmonice* n. sp. 3**

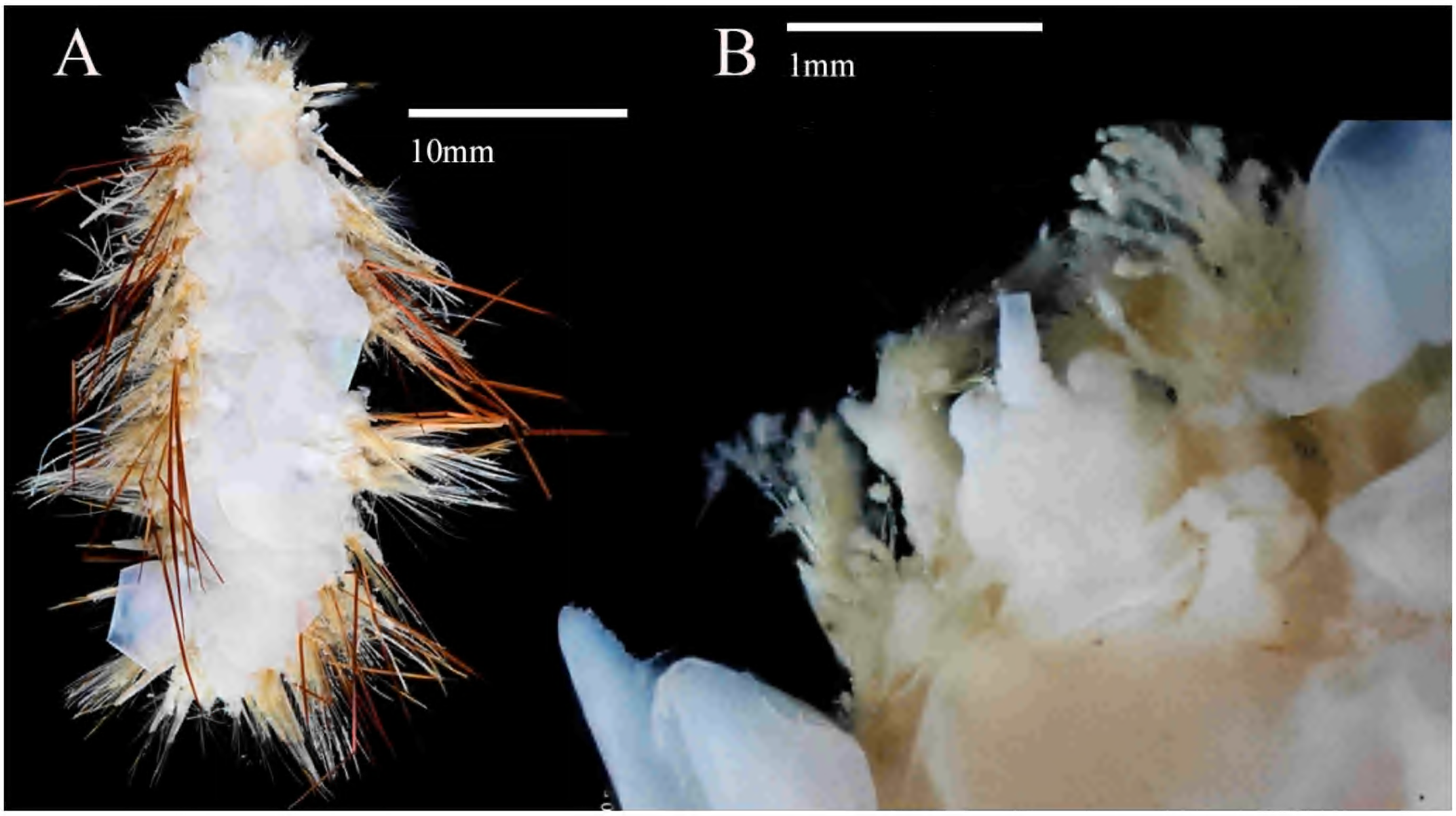

Figure 6. *Laetmonice* n. sp. 3. AM W. 53419 (Op 018) (A) entire animal, dorsal, (B) prostomium, dorsal.

Diagnosis Body dorsoventrally flattened; about 33 to 35 segments. Prostomium globular, with median antenna and one pair of stalked eyes; papillate facial tubercle present, situated below base of palps. Elytra 14 to 15 pairs on segments 2, 4, 5, 7 to 25, then on every third segment. Elytra not covered dorsal felt (formed by capillary notochaetae). Harpoon-shaped notochaetae present. Notochaetae up to 12 per notopodium. Very long chaetae that are equal to the body width.

Taxonomic remarks *Laetmonice* sp. 3 is morphologically similar to *Laetmonice wonda* Hutchings & McRae, 1993 given the similar character combination of 33–35 segments, 14–15 pairs of elytra, presence of nuchal flaps on prostomium, two pairs of eyes and long papillae on facial tubercle. The species is distinct as it shows greater number of harpoon notochaetae, up to 12 per notopodium, and very long chaetae that are equal to the body width. The species has been described in Flaxman & Kupriyanova (2024).

Distribution IOT, off Christmas Island (463 m).

Ecology and life history Epibenthic predator.

Family Eunicidae

***Eunice* sp. 1**

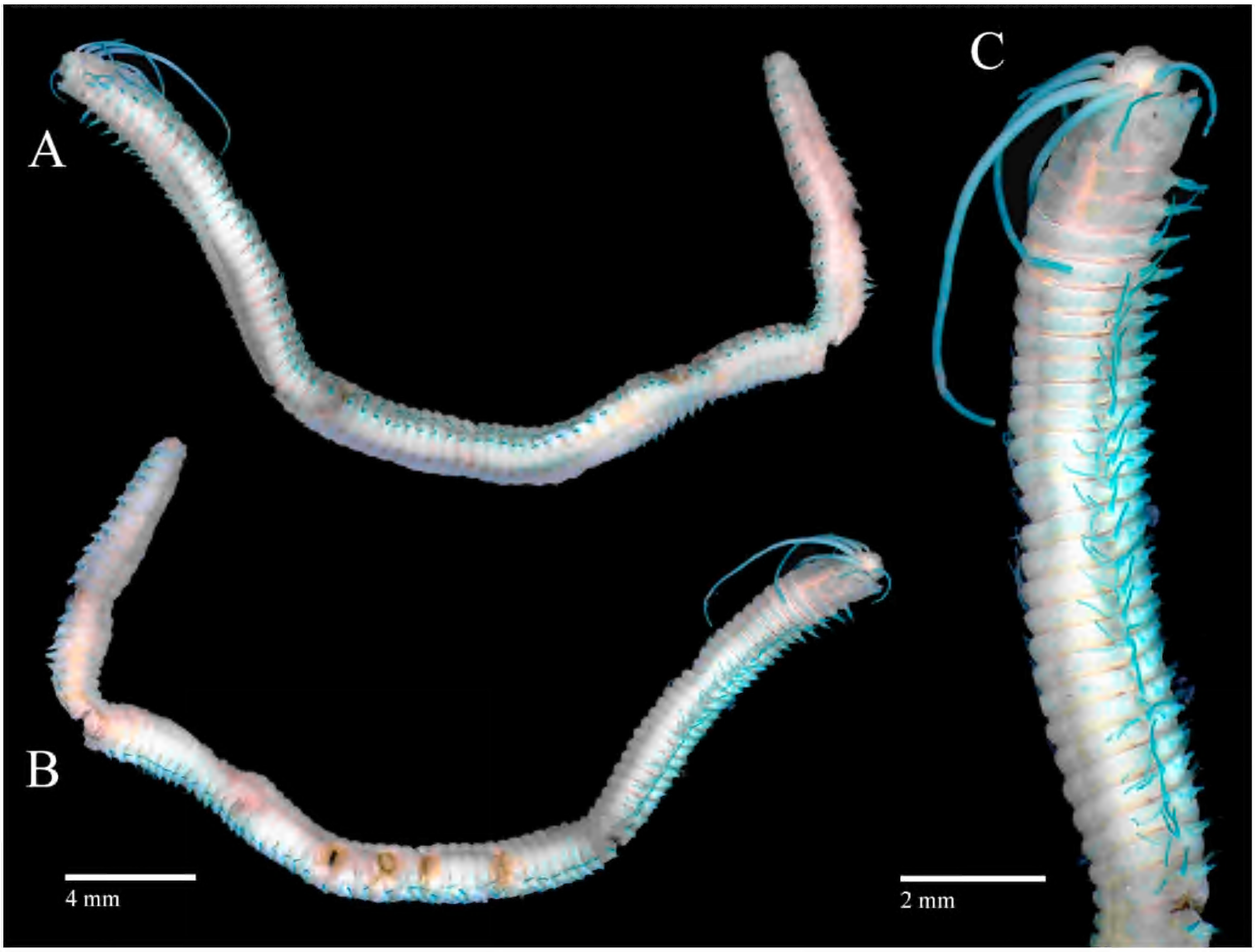

Figure 7. *Eunice* sp. 1. AM W.54834 (Op 141) (A-B) anterior fragment stained, (A) ventral, (B) dorsal, (C) anterior end, dorsal.

Diagnosis Prostomium bilobed, long median and lateral antennae. Branchiae from chaetiger 8 to chaetiger 28, maximum number of filaments 5. Aciculae and sub-acicular hooks golden in colour. Anterior fragment only present.

Taxonomic remarks The genus *Eunice* is very speciose, with over 300 valid names and is not well represented in the deep sea. Generally, a complete specimen is needed for a full description, but this species is unusual as the branchiae are poorly developed and restricted to a relatively few chaetigers.

Distribution IOT, seamounts off Christmas and Cocos (Keeling) Islands (1110–1139 m).

Ecology and life history Carnivorous.

Eunice sp. 2

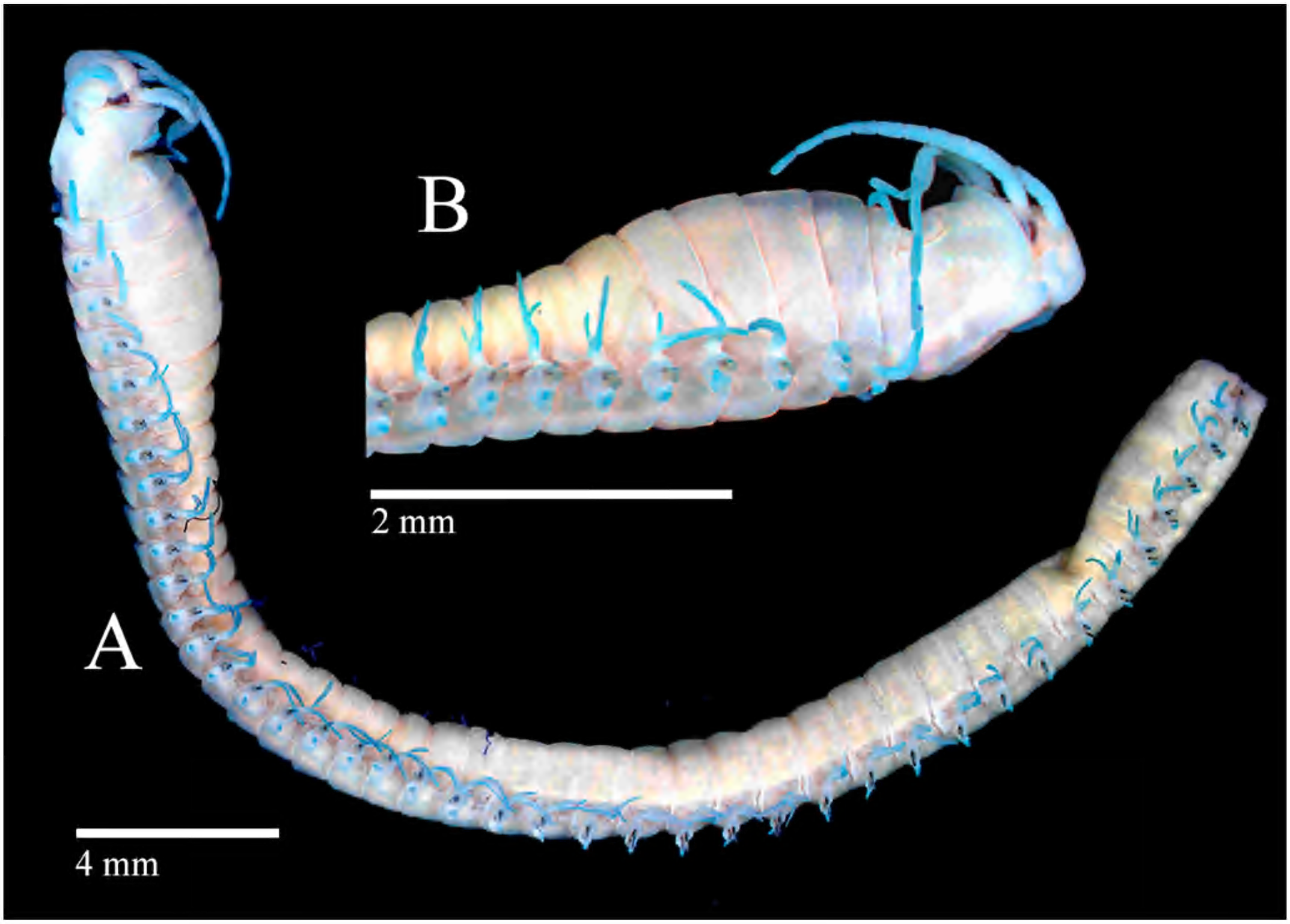

Figure 8. *Eunice* sp. 2. AM W.54503 (Op 179) anterior fragment stained, (A) anterior end, lateral, (B) head, lateral.

Diagnosis Bilobed prostomium. Well-developed eyes and median and lateral antennae. Branchiae from chaetiger 6 and continue to at least chaetiger 42 (anterior fragment). In same vial some posterior segments with branchiae on all segments. Both sections have numerous black aciculae and sub acicular hooks.
Taxonomic remarks The genus *Eunice* is very speciose with over 300 valid names described and it is not well known offshore in Australian waters. This specimen has an unusually large number of black aciculae and sub acicular hooks, but it is incomplete while a complete specimen is needed for a full description.
Distribution IOT, seamounts off Christmas and Cocos (Keeling) Islands (111–121 m).
Ecology and life history Carnivorous.

Family Glyceridae

***Glycera* cf. *lapidum* Quatrefages, 1866**

Figure 9. *Glycera* cf. *lapidum*. NMV F315325 (Op 151) dorso-lateral view.

Diagnosis Prostomium comprising about 6 indistinct annulations. Segments of mid-body region triannulate. Pharyngeal papillae without full-length median longitudinal ridge, without terminal "fingernail" structure. Parapodia after chaetiger 2 biramous, with two aciculae and two prechaetal lobes. Dorsal prechaetal lobe shorter than ventral prechaetal lobe, postchaetal lobes a single rounded lobe.

Taxonomic remarks *Glycera lapidum* is currently attributed with a global distribution and occurring over a depth range of 0–3947 m with sufficient variability documented that it probably represents a species complex (Böggemann, 2002; Rizzo *et al.*, 2007), hence the "cf." determination.

Distribution IOT, seamounts off Christmas and Cocos (Keeling) Islands (603–3154 m).

Ecology and life history Predator.

Family Hesionidae

***Paralamprophaea* cf. *crosnieri* Salazar-Vallejo, 2020**

Figure 10. *Paralamprophaea* cf. *crosnieri*. AM W.54514 (Op 179) entire animal, (A) dorsal, (B) ventral.

Diagnosis Fixed chaetiger number of 16. Broad brown bands with well-defined margins dorsally; narrower unpigmented region at intersegments. Prostomium with medium-sized palpophores, 2–3 times longer than palpostyles; anterior eyes twice as large as posterior ones. Tentacular cirri and sometimes dorsal ones with narrow brown bands. Nuchal organs L-shaped, foot of 'L' sinuous in large specimens. Chaetigers 1–4 uniramous, 5–16 biramous.

Taxonomic remarks According to the key in Salazar-Vallejo (2020), the specimens are identified as *P. crosnieri* Salazar-Vallejo, 2020, a species originally described from off Madagascar in 250–265 m. However, minor differences, i.e., the shape of the peristomial dorsolateral tubercles, which are regarded as a specific feature by Salazar-Vallejo (2020), separate three very similar Indo-Pacific species (*Paralamprophaea crosnieri*, *P. diplognatha* Monro, 1926 and *P. leslieae* Salazar-Vallejo, 2020. Molecular data would shed light on the relationships of these three species. A juvenile specimen, AM W.54610, although showing the typical pigmentation of *P. crosnieri*, has all parapodia uniramous. Possibly it suggests late ontogenetic development of the notopodia, or it belongs to another species.

Distribution IOT, seamounts off Christmas and Cocos (Keeling) Islands (111–121 m).

Ecology and life history Unknown.

***Paralamprophaea* n. sp.**

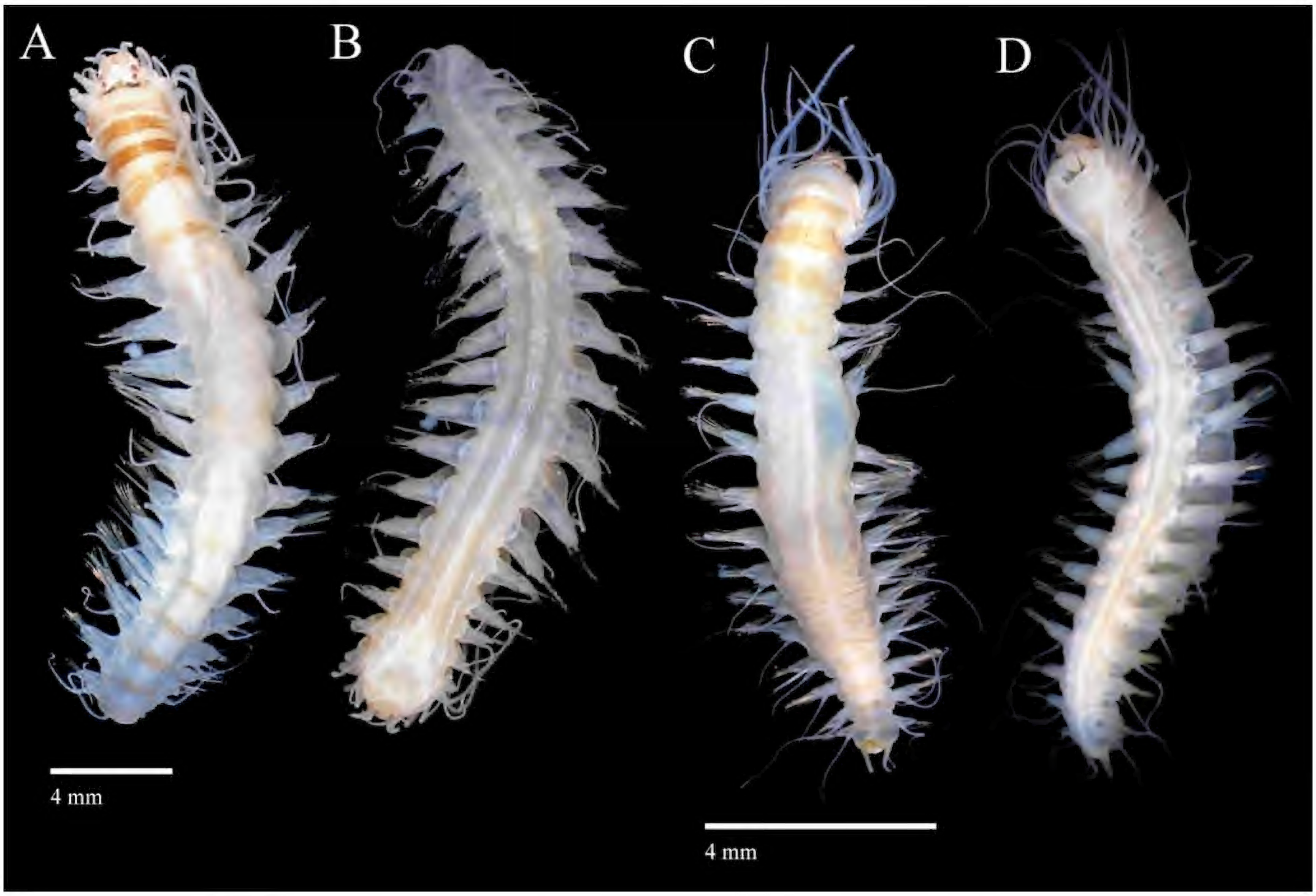

Figure 11. *Paralamprophaea* n. sp. AM W.54611 (Op 170) (A-B) entire animal, (A) dorsal, (B) ventral (C-D) AM W.54838 (Op 170) entire animal, (C) dorsal, (D) ventral.

Diagnosis As for *Paralamprophaea* cf. *crosnieri*, but pigmentation only present anteriorly, and chaetigers 1–3 uniramous and 4–16 biramous.

Taxonomic remarks According to the key in Salazar-Vallejo (2020), the eight specimens are identified as *P. greeffiana* (Augener, 1918) from Western Africa, which is the only member of the genus having biramous parapodia from chaetiger 4. However, differences in the pigmentation pattern and shape of the nuchal organs (and distribution in different ocean basins), suggest that the present specimens belong to an undescribed species. Molecular data across a range of *Paralamprophaea* species would clarify whether the start position of the biramous parapodia, pigmentation pattern, and shape of the peristomial dorsolateral tubercles are good species characters.

Distribution IOT, seamounts off Christmas and Cocos (Keeling) Islands (271–1020 m).

Ecology and life history Unknown.

Family Iphionidae

***Iphione treadwelli* Pettibone, 1986**

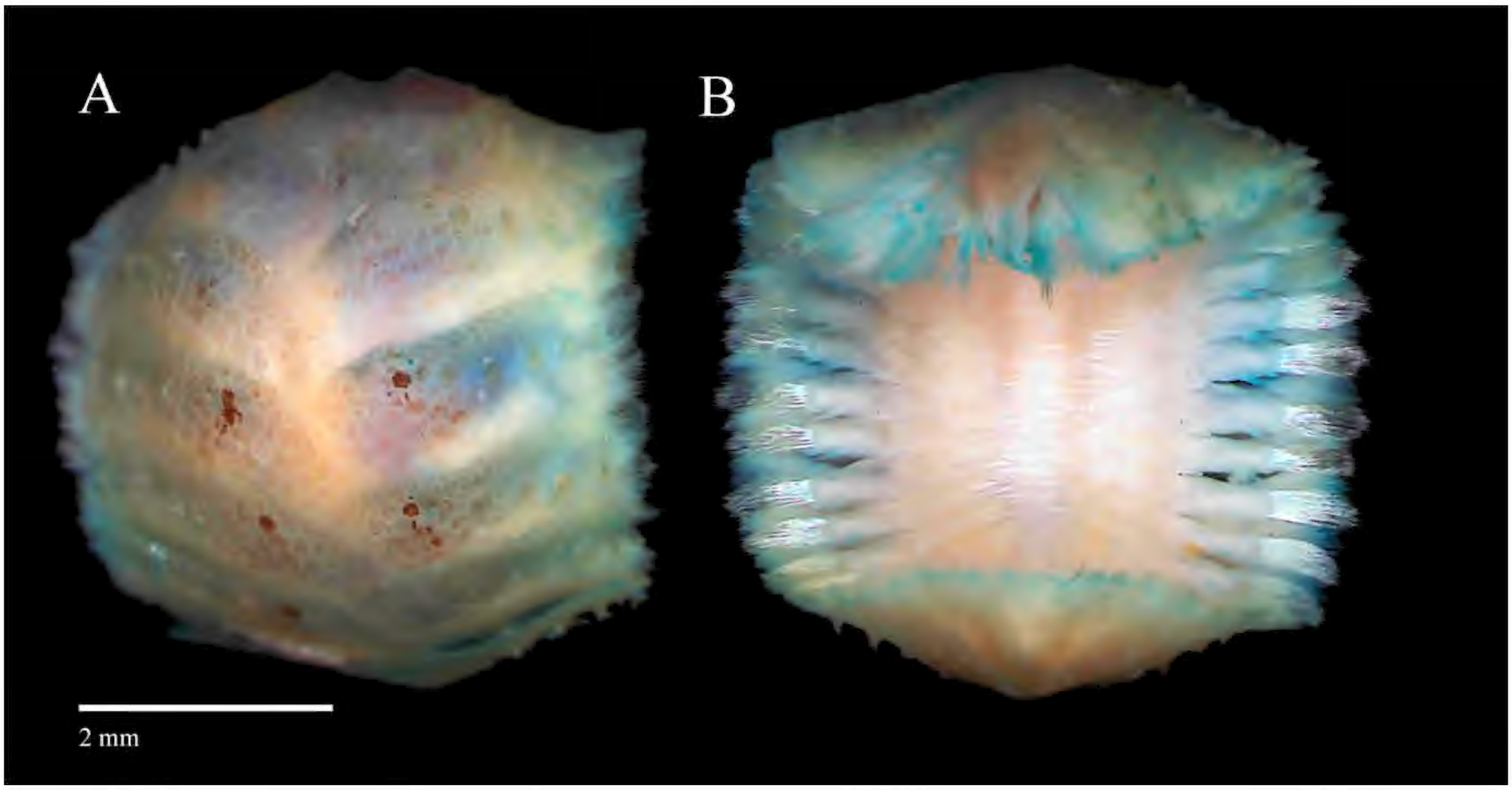

Figure 12. *Iphione treadwelli*. AM W.54429 (Op 179) entire animal coiled and stained, (A) dorsal, (B) ventral, first elytral pairs removed.

Diagnosis Single complete specimen with 29 segments, 13 pairs elytra. Body short, flattened ventrally and arched dorsally. Prostomium bilobed, with deep anterior notch, without cephalic peaks, 2 lateral antennae inserted terminally, median antenna reduced to small papilla located near posterior border of prostomium. 2 pairs of eyes. Palps papillated. Elytra 13 pairs, on segments 2, 4, 5, 7, on alternate segments to 23, and on 27. Elytra large, stiff, round (anteriorly) to reniform, tightly imbricate, surface with mosaic of "honeycombed" polygonal areas and up to 7 large, raised cone-shaped tubercles, posterolateral margins with fringe of bead-like scaled papillae. Notochaetae numerous, forms thick bundle, slender, bipinnate, with capillary tips. Neurochaetae numerous, with rows of spines and unidentate slightly hooked tips.

Taxonomic remarks This species is distinguished from congeners by elytra with lateral fringes of scale-like papillae, large oval raised vesicles on the elytra, combined with unidentate neurochaetae.

Distribution Hawaiian Islands in 51–238 m (Pettibone, 1986); Coral Sea (Chesterfield Islands and Fairway Reefs in 36–88 m, Hanley & Burke, 1991); IOT, Cocos (Keeling Islands), Muirfield Seamount (111–121 m).

Ecology and life history Found in coarse coral and sand, gravel, and shelly coralline sediments. Pettibone (1986) reviews the habit and biology of *Iphione* spp., describing them as "chiton-like" in their body shape and movement, camouflaged by detritus which clings to their elytra.

Family Melinnidae

***Melinna* n. sp. 1**

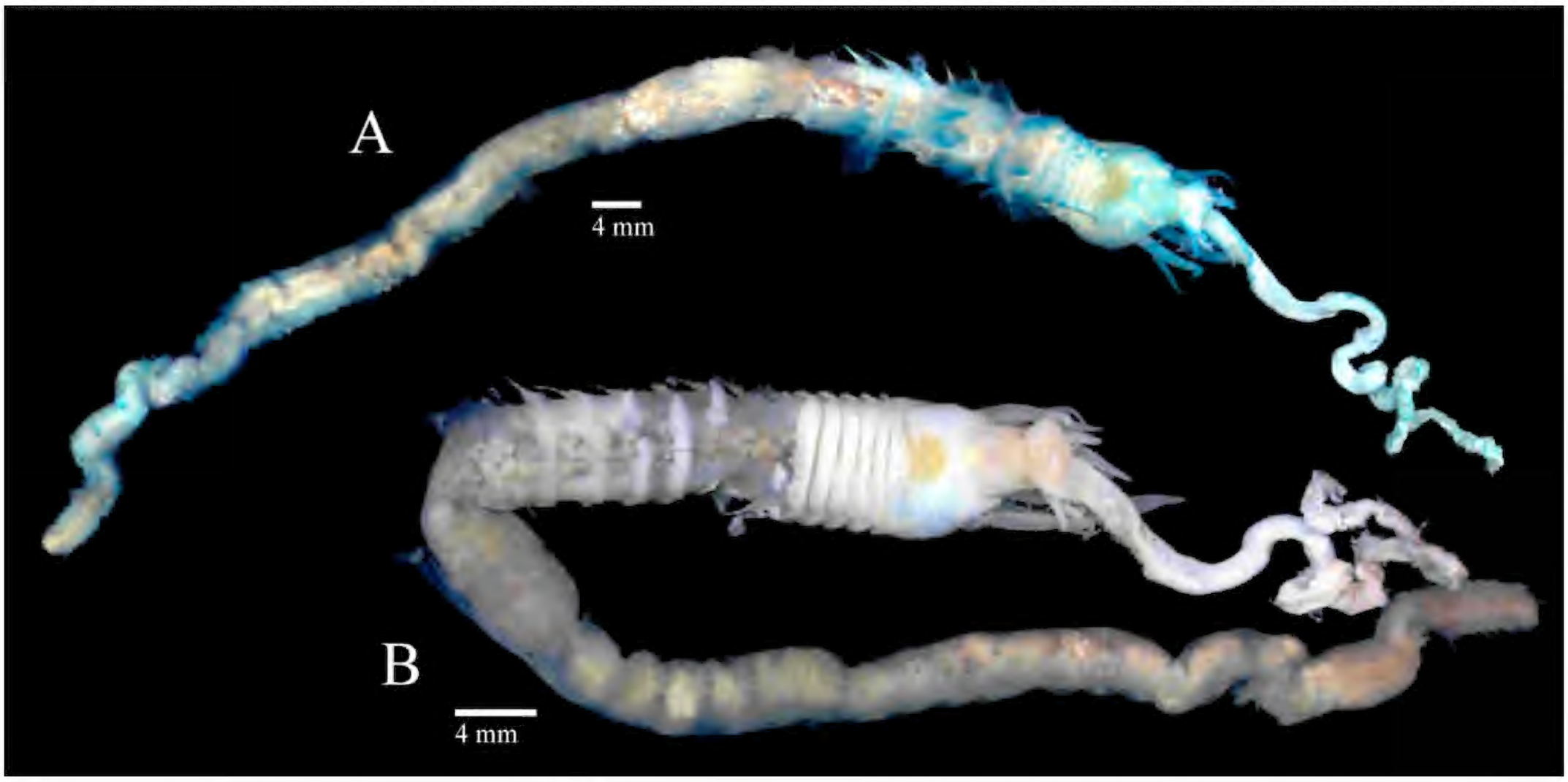

Figure 13. *Melinna* sp. AM W.54625 (Op 115) entire animal, (A) stained and extended, dorsal, (B) coiled, dorsal.

Diagnosis Numerous smooth buccal tentacles. Four pairs of smooth branchiae. Nuchal hooks present on segments 3–4. Fine neuropodial acicula on segments 3–5. Fourteen thoracic uncinigerous segments.

Taxonomic remarks In total, 26 species of *Melinna* have been described from around the world from shallow to deep water. One species, *M. hamulus* Gunton et al., 2023 has been recorded from Bass Strait, SE Australia, at 4133–4197 m. However, in *M. hamulus* all the buccal tentacles are uniform in size, whereas the specimen AM W.54625 has one highly modified buccal tentacle similar to *M. monoceroides* Fauvel, 1936 which was described from off Morocco.

Distribution IOT, seamounts off Cocos (Keeling) Islands, Scrooge Seamount (2973–2974 m).

Ecology and life history Unknown.

Melinnopsis sp. 1

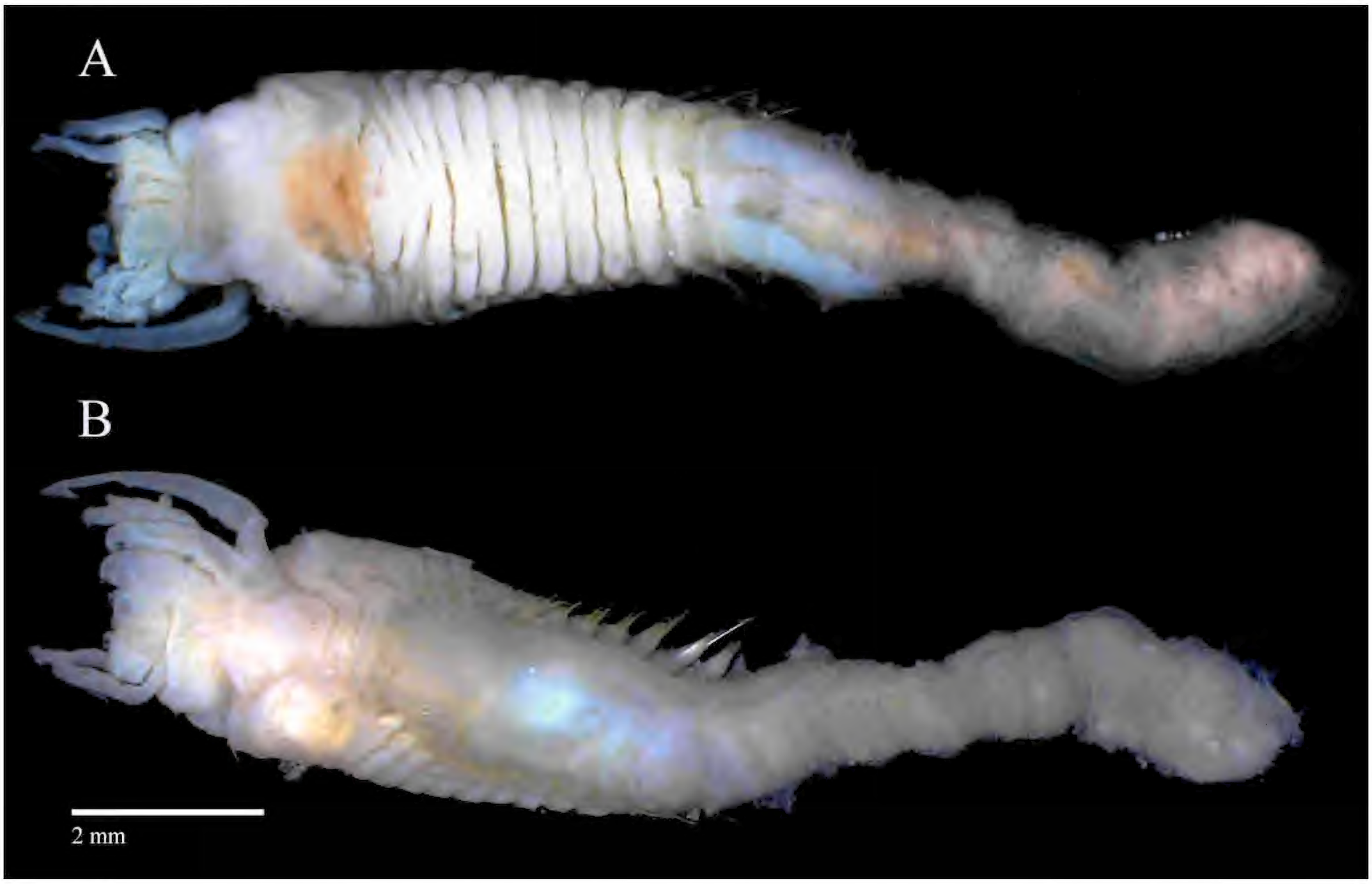

Figure 14. *Melinnopsis* sp. 1 AM W.53457 (Op 031) entire animal, (A) dorsal, (B) ventral.

Diagnosis Smooth buccal tentacles. Three pairs of smooth branchiae. Nuchal hooks and paleae absent. Acicular neurochaetae on segments 3–5. 13 pairs of uncinigerous thoracic segments. Eye spots absent.
Taxonomic remarks Currently 18 described species in the genus, including two from the abyss off the east Australian coast *Melinnopsis gardelli* Gunton et al., 2020 and *Melinnopsis chadwicki* Gunton et al., 2020. However, the single posteriorly incomplete specimen, with few poorly preserved abdominal segments AM W. 53457 clearly differs from these two species in having 13 thoracic uncinigerous thoracic chaetigers whereas the other two Australian species have 12 chaetigers only.
Distribution IOT, seamounts off of Christmas Island, Clara Marie Seamount (2189–2264 m).
Ecology and life history Unknown.

Family Nephtyidae

***Aglaophamus* cf. *hedlandensis* Rainer & Kaly, 1988**

Figure 15. *Aglaophamus* cf. *hedlandensis*. NMV F315411 (Op 161) dorsal

Diagnosis Prostomium wider than long. Antennae present. Palps simple. Prostomial eyespots absent. Eyespots on anterior chaetigers absent. Prostomium broadest at anterior margin, antennae long cirriform with slight terminal enlargement. Dorsal cirri present from chaetiger 2. Branchiae present; start on chaetiger 3. Branchiae form cirriform, roughly circular in cross-section (not ciliated); curvature involute (curve outward initially). Accessory cirri on branchiae absent. Ventral interramal cirri absent. Large leaf-like post-chaetal lamellae in notopodia and neuropodia. Specialised dentate chaetae absent from notopodium of chaetiger 1. Barred chaetae present in preacicular fascicles. Lyrate chaetae absent. Spinose post-acicular chaetae present. Capillary chaetae present.

Taxonomic remarks This OTU is apparently distinct from all known Australian Nephytidae. It is closest to *A. hedlandensis* Rainer & Kaly, 1988 but differs in the broader anterior margin of the prostomium and the smooth (not ciliated) cirriform branchiae

Distribution IOT, seamounts off Christmas and Cocos (Keeling) Islands (808–801 m).

Ecology and life history Unknown.

Aglaophamus cf. *victoriae* Rainer & Kaly, 1988

Figure 16. *Aglaophamus* cf. *victoriae*. NMV F315233 (Op 189) entire animal (A), chaetiger 20 parapodium (B)

Diagnosis Antennae present. Palps simple. Prostomial eyespots present. Number of pairs of prostomial eyespots one (red, widely-spaced at base of nuchal organs). Eyespots on anterior chaetigers absent. Bifid terminal pharyngeal papillae present; 20 papillae. Subdistal pharyngeal papillae present. Enlarged median subdistal dorsal pharyngeal papilla absent. Dorsal cirri present from chaetiger 2. Branchiae present; start on chaetiger 3. Branchiae form cirriform, roughly circular in cross-section; curvature involute (curve outward initially). Accessory cirri on branchiae absent. Ventral interramal cirri present (but reduced, present as a short tubercle). Post-chaetal neuropodial lamellae poorly-developed throught, rounded and shorter than acicular lobes throughout. Specialised dentate chaetae absent from notopodium of chaetiger 1. Barred chaetae present in preacicular fascicles. Lyrate chaetae present among postacicular chaetae of middle and posterior chaetigers; tines of similar length.

Taxonomic remarks This species is apparently distinct from all other Australian nephtyids. It is closest to *Aglaophamus victoriae* Rainer & Kaly, 1988 but differs in that there is a single pair of prostomial eyespots and they are much more widely spaced, located at the base of the nuchal organs (in *A. victoriae* there are 2 pairs located more closely together), and the ventral interramal cirri are present as a stub (in *A. victoriae* they are long, cirriform).

Distribution IOT, seamounts off Christmas and Cocos (Keeling) Islands (1304–1943 m).

Ecology and life history Unknown.

Family Nereididae

***Ceratonereis* cf. *mirabilis* Kinberg, 1865**

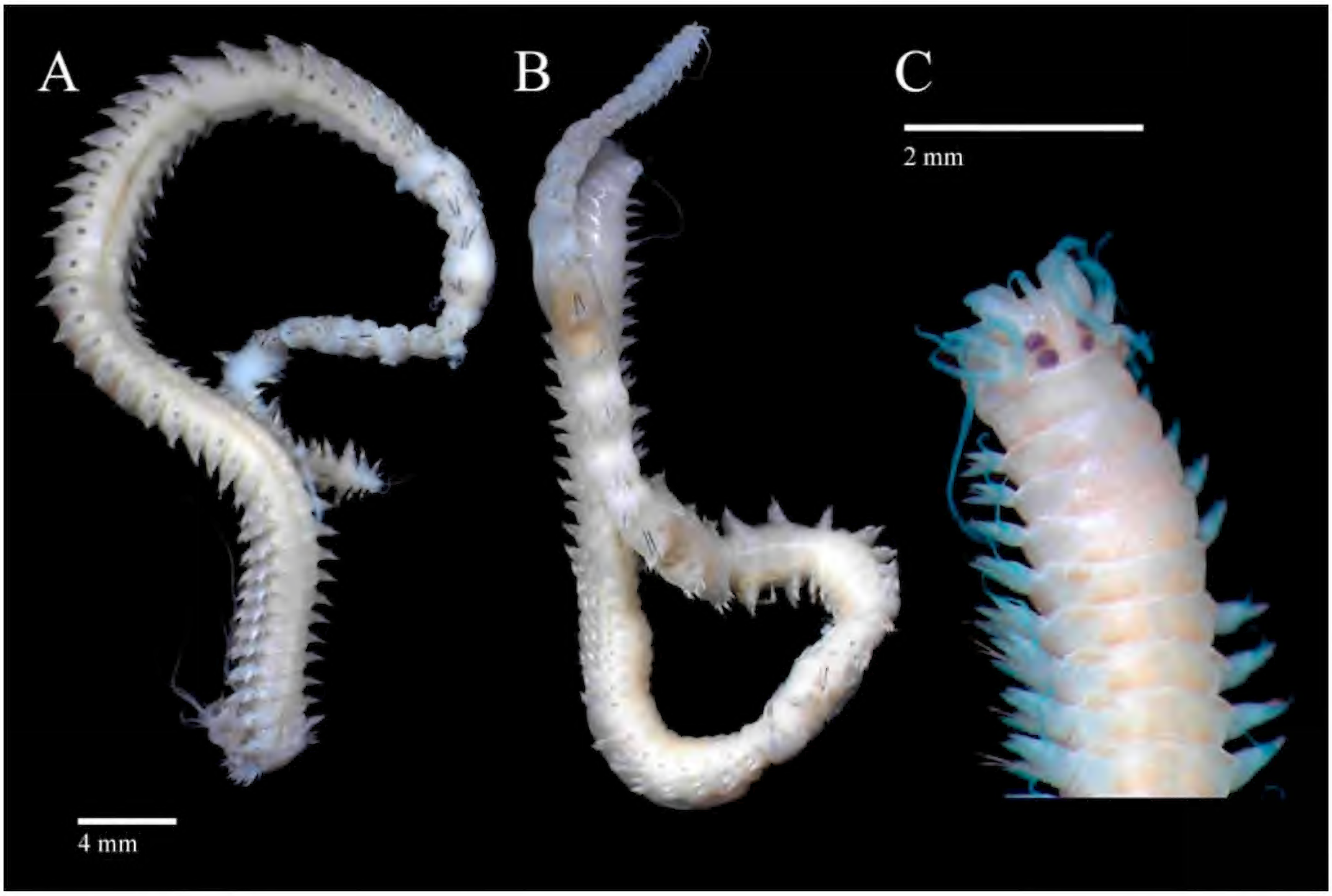

Figure 17. *Ceratonereis* cf. *mirabilis*. AM W.54621 (Op 172) (A-B) entire animal, (A) ventro-lateral, (B) dorso-lateral, (C) anterior end stained, dorsal.

Diagnosis Patches of brown pigmentation on head and discontinuous transverse brown stripes on first 4–5 chaetigers dorsally; ventrally, paired comma-shaped pigment patches at base of ventral cirri of midbody, corresponding to the metamorphosed region. Two pairs of large, black eyes. Longest tentacular cirri extending to about chaetiger 15. Maxillary ring, paragnaths (pale brown) with dental formulae: A I: 0; A II: 3 in a line; A III: 4 in a circular patch; A IV: 6 in an elongate patch. Jaws pale brown, 5 teeth per side. Anterior dorsal cirri 1.5x length of dorsal notopodial lobe. Notopodium with 6 homo- to sesquigomph spingers (3 with long blades, 3 with shorter truncate blades). Neuropodium dorsally with 5 homospingers, 2 heterogomph falcigers; neuropodium ventrally with 6 heterogomph falcigers, blade lengths same from dorsal to ventral. Metamorphosed region starting at chaetiger 15.

Taxonomic remarks The two specimens key out to *Ceratonereis mirabilis* Kinberg, 1865 using Wilson *et al.* (2003). They most likely represent a new species of the widespread *Ceratonereis mirabilis* group. Both specimens show weak signs of metamorphosis (epitoky) and were likely only weeks away from spawning.

Distribution IOT, seamounts off Christmas and Cocos (Keeling) Islands (169–176 m).

Ecology and life history Unknown.

Ceratonereis n. sp. 1

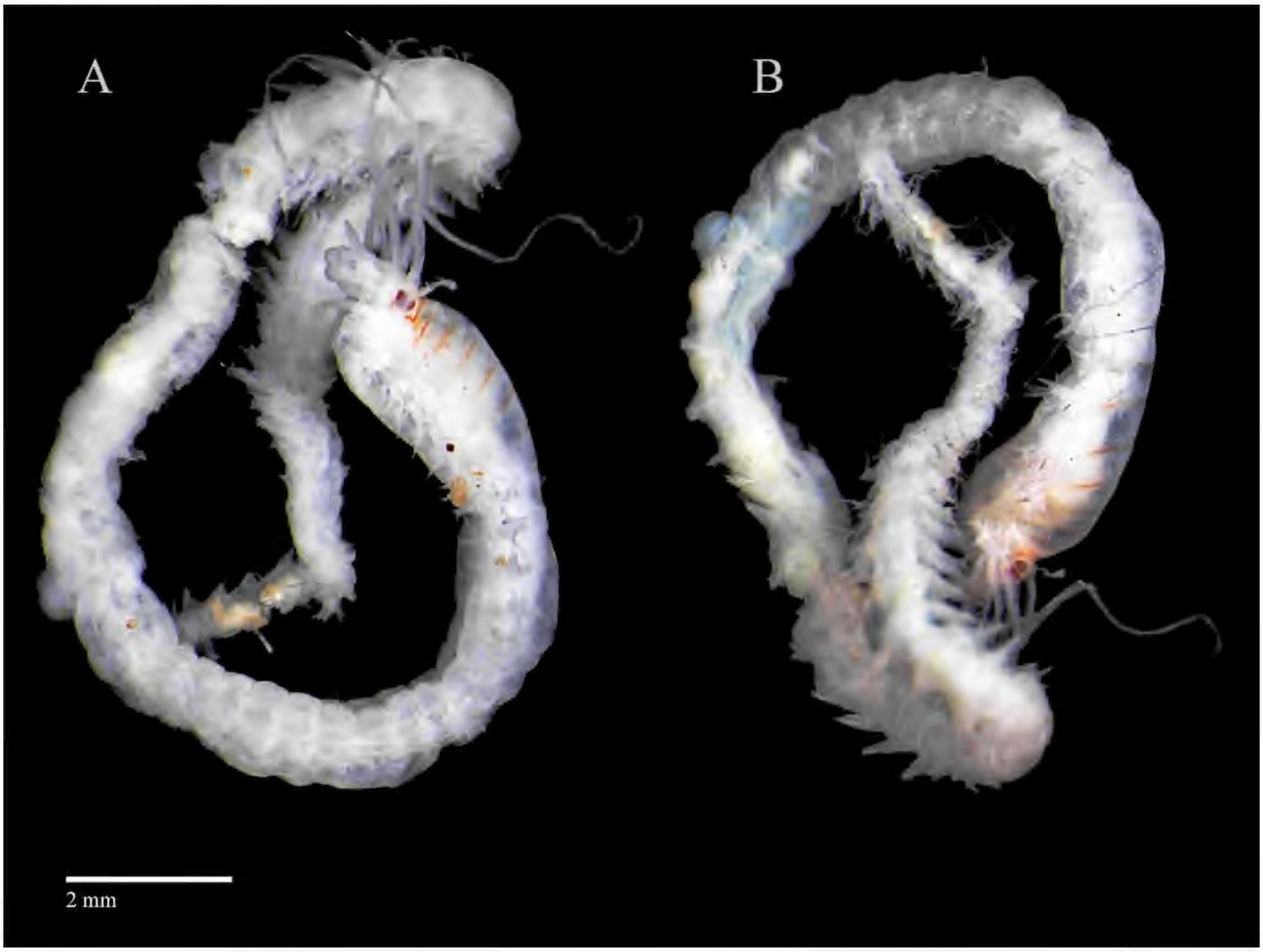

Figure 18. *Ceratonereis* n. sp. 1. AM W.54622 (Op 179) entire animal, (A) dorsal, (B) ventral.

Diagnosis Typical member of *Ceratonereis*, in having the anterior part of the prostomium indented and two pairs of large, black eyes. Longest tentacular cirri extending back to about chaetiger 8–9. Pharynx bearing paragnaths on the maxillary ring only (paragnath count similar to *Ceratonereis mirabilis*); papillae absent; jaws have a dentate cutting edge. Anterior dorsal cirri more than 2.0x length of dorsal notopodial lobe.
Taxonomic remarks The two specimens examined key out to *Ceratonereis* species using Wilson *et al.* (2003), but not to any known species. They differ from *Ceratonereis* cf. *mirabilis* above in having much longer dorsal and tentacular cirri; they show no signs of reproductive modification.
Distribution IOT, seamounts off Christmas and Cocos (Keeling) Islands (111–121 m).
Ecology and life history Unknown.

***Nereis* sp. 1**

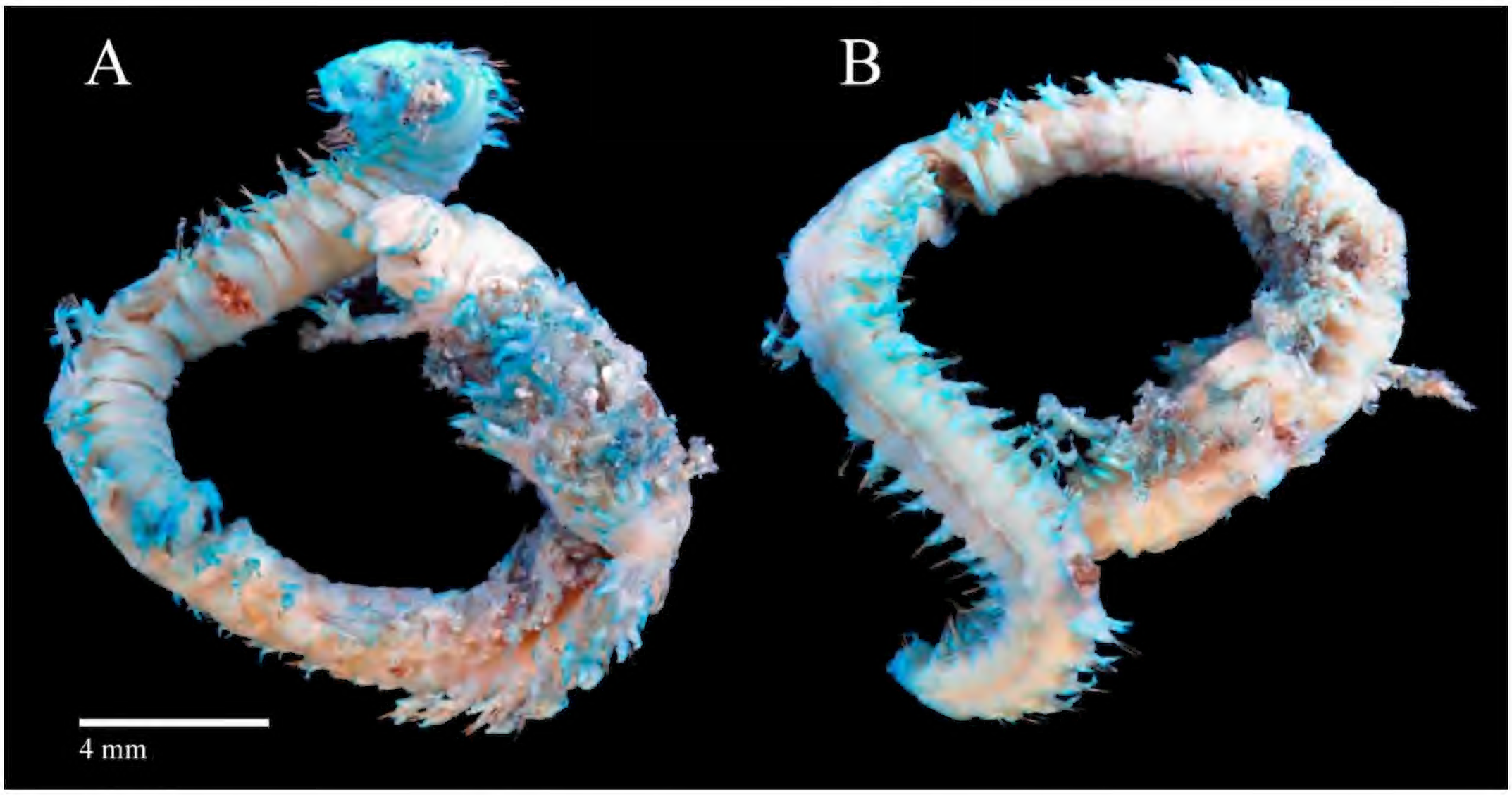

Figure 19. *Nereis* sp. 1 AM W.54425 (Op 183) entire animal stained, (A) dorso-lateral, (B) ventro-lateral.

Diagnosis As is found in some other deep-sea nereidids, this specimen lacks eyes. The maxillary ring carries conical paragnaths with dental formulae as follows: A I: 4; A II: 10 in an elongate patch; A III: 35 in a rectangular patch, no separate lateral patches; A IV: 35 in a triangular patch; A V: absent; A VI: 5, on each side in a circular patch; and A VII–VIII: 80 paragnaths of two different sizes in 1 or 2 rows. Jaws, pale brown, with many small teeth. Notopodial homogomph falcigers with short smooth blades.
Taxonomic remarks The specimen is almost complete (missing last few posterior segments) but is in poor condition. It belongs to genus *Nereis*, in particular because of the presence of notopodial homogomph falcigers. Species identification is difficult as *Nereis* is a large genus with over 200 species and there are no recent revisions or studies that delineate species into informal subgroups (Wilson *et al.*, 2023).
Distribution IOT, seamounts off Christmas and Cocos (Keeling) Islands, Indian Ocean (3948–4047 m).
Ecology and life history Unknown.

Family Onuphidae

***Anchinothria* sp.**

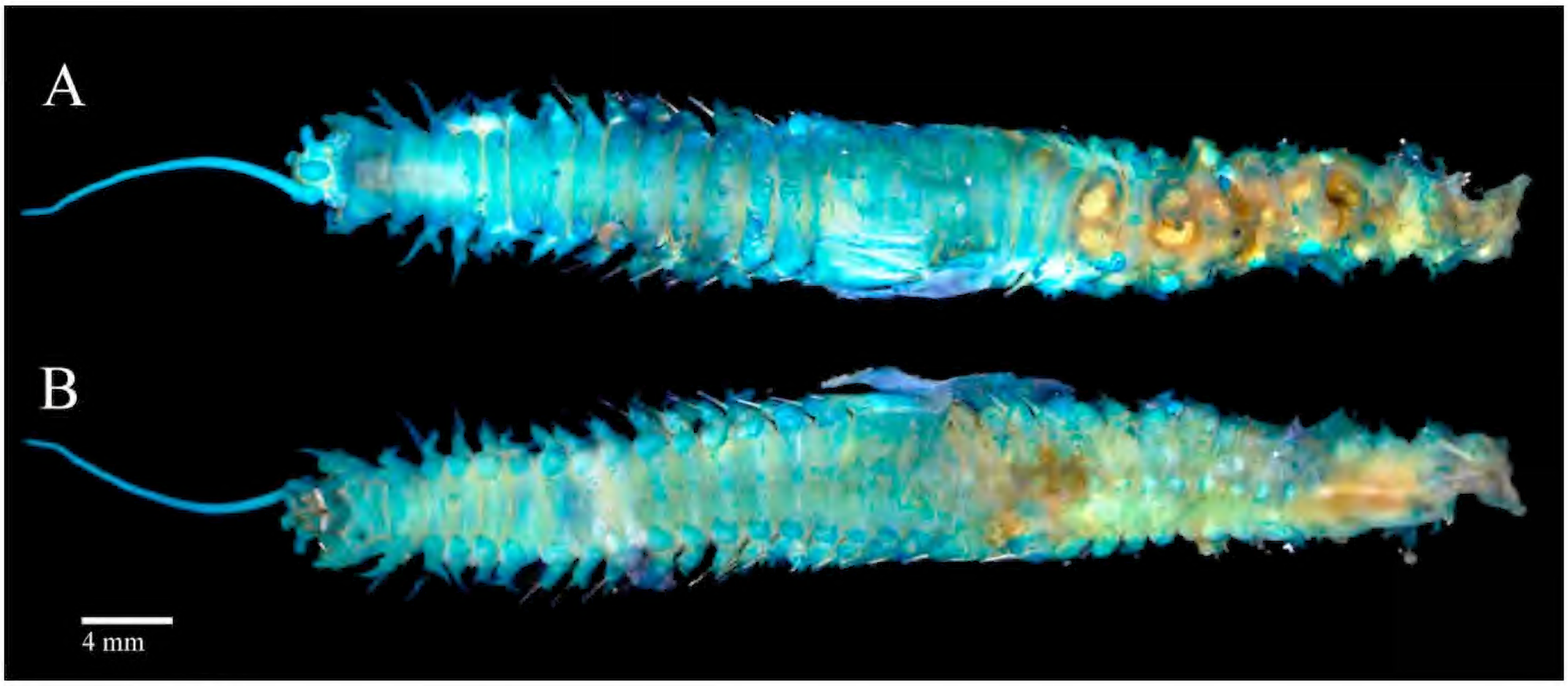

Figure 20. *Anchinothria* sp. AM W.54596 (Op 157) entire animal stained, (A) dorsal, (B) ventral.

Diagnosis Circular frontal lips; peristomial cirri present. Parapodia 1 enlarged; subulate ventral cirri on chaetiger 1 and 2. Pectinate chaetae "scoop-shaped"; simple branchiae. The material consists of three anterior fragments in poor condition so that the origin of branchiae and types of chaetae cannot be established. Round tubes of inner parchment-like lining and outer muddy layer with embedded foreign objects such as foraminiferans and spines or spicules.

Taxonomic remarks The specimens possibly belong to *A. pycnobranchiata*(McIntosh, 1885), widely distributed in great depths of southern oceans, perhaps a species complex; reported as *Anchinothria* sp. from the Great Australian Bight (MacIntosh *et al.*, 2018, additional file 2) and as *A.* cf. *pycnobranchiata* from the Eastern Australian Abyss (Gunton *et al.*, 2021).

Distribution IOT, seamounts off Cocos (Keeling) Islands Territory, Muirfield Seamount (1019–1023 m).

Ecology and life history Unknown.

Hyalinoecia **sp.**

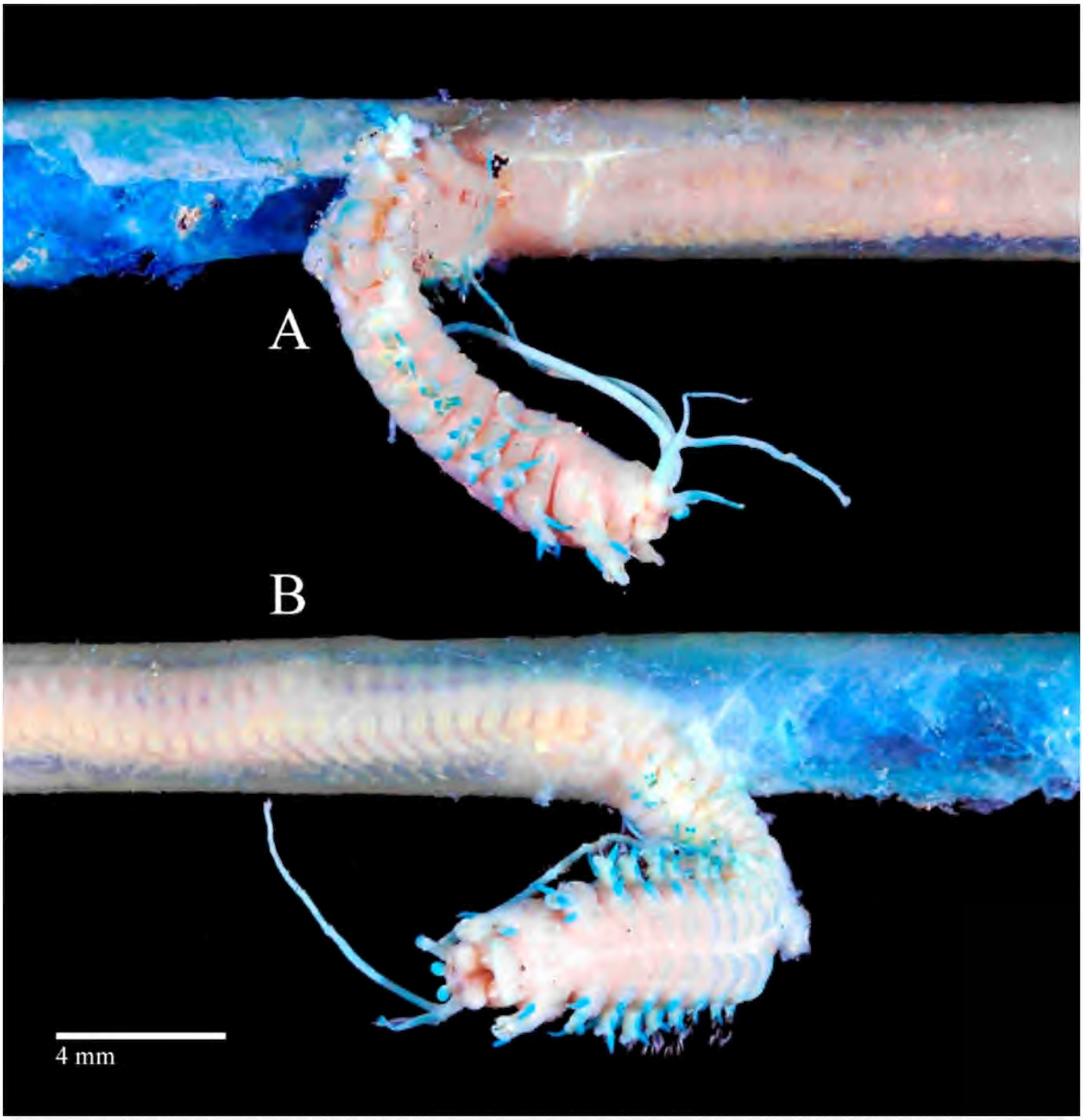

Figure 21. *Hyalinoecia* sp. AM W.53503 (Op 013) animal in tube stained, (A) dorsal, (B) ventral.

Diagnosis Frontal lips ovoid. Eyes not visible; peristomial cirri absent. Parapodium 1 enlarged, with weakly bidentate simple hooks. Scoop-shaped pectinate chaetae and limbate chaetae from chaetiger 2. Single branchial filament from chaetiger 26. Tubes round in cross-section, translucent, quill-like.

Taxonomic remarks This genus is well recognisable because of its semi-transparent tube. The specimen possibly belongs to *H. longibranchiata* (McIntosh, 1885) reported from New Zealand.

Distribution IOT, off Christmas Island, off McPherson Point (1363–1501 m).

Ecology and life history Unknown.

***Nothria simplex* Paxton, Budaeva & Gunton, 2023**

Figure 22. *Nothria simplex*. AM W.54619 (Op 147) anterior fragment, (A) dorsal, (B) ventral.

Diagnosis Eyes absent; peristomial cirri present. Chaetiger 1 greatly enlarged, extending beyond peristomium, with auricular prechaetal lobes. Simple and pseudocompound hooks on chaetiger 1 and 2. Chaetiger 3 with limbate chaetae and "scoop-shaped" pectinate chaetae only. Subacicular hooks from chaetiger 13–15.

Taxonomic remarks This recently described species (Paxton *et al.*, 2023) was well supported by sequencing, although the Indian Ocean specimens have not been genetically tested yet. The Indian Ocean specimens were collected without tubes while the original Eastern Australian specimens had some tubes with a parchment-like inner layer, covered on the outside with foraminiferans and shell fragments.

Distribution Off Eastern Australia, Central Eastern Marine Park (2429–2518 m) and Off Fraser Island (2342–2350 m). IOT, off Cocos (Keeling) Islands Territory (2617–2721 m).

Ecology and life history Unknown.

Nothria **sp. 1**

Figure 23. *Nothria* sp. 1. AM W.54620 (Op 145) anterior fragment stained, (A) dorsal, (B) ventral.

Diagnosis Eyes absent; peristomial cirri present. Chaetiger 1 enlarged but not extending beyond peristomium; with auricular prechaetal lobes. Branchiae present after chaetiger 18. Bidentate simple and pseudocompound hooks on chaetiger 1; pseudocompound hooks on chaetiger 2 and 3. Limbate chaetae and "scoop-shaped" pectinate chaetae from chaetiger 2. Subacicular hooks from chaetiger 11–12. Tubes not recovered.

Taxonomic remarks The five anterior fragments are in poor condition; they consist of one ovigerous and four smaller specimens.

Distribution IOT, off Cocos (Keeling) Islands (3002–3078 m).

Ecology and life history Unknown.

Nothria sp. 2

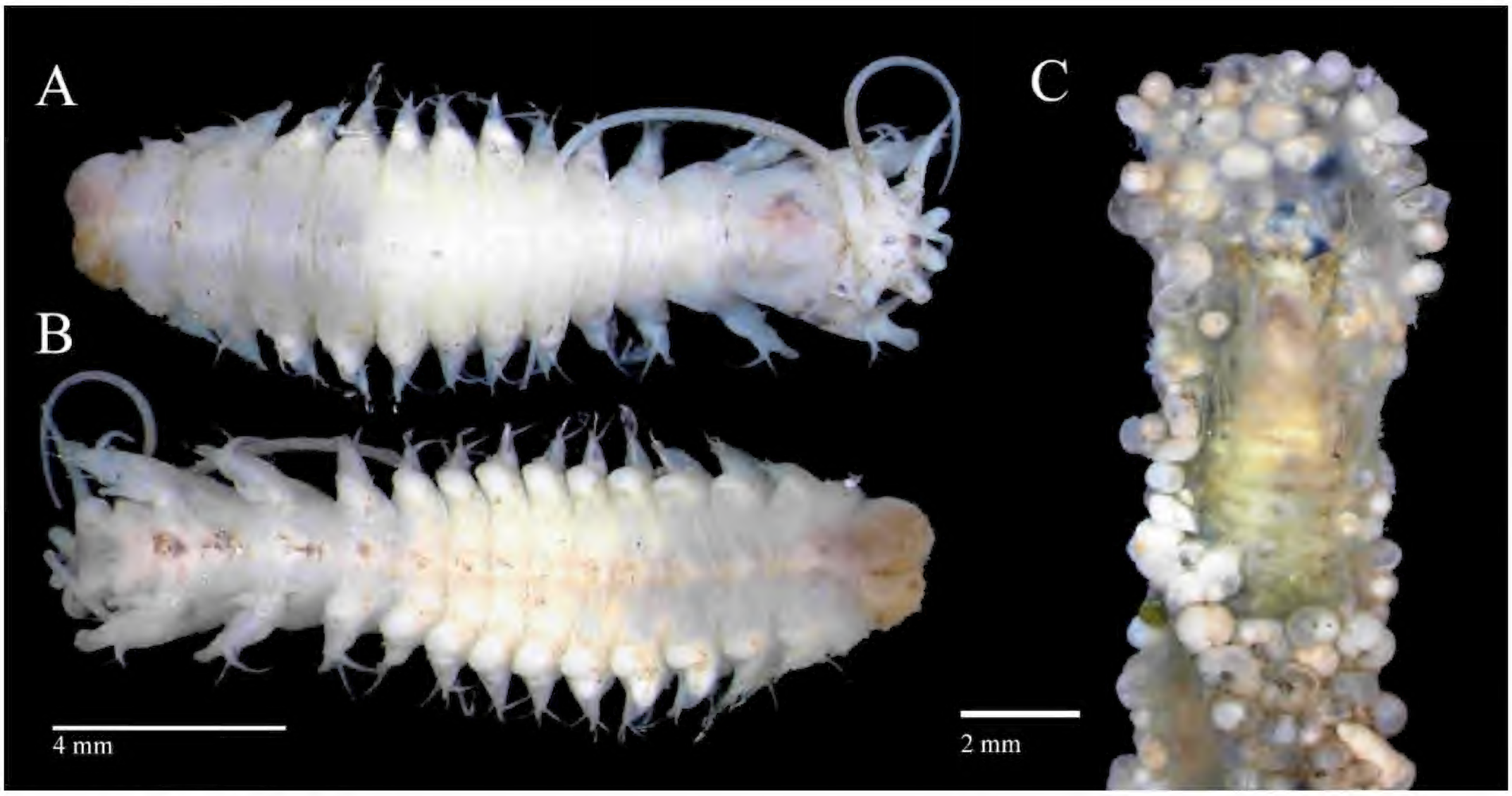

Figure 24. *Nothria* sp. 2. AM W.54618 (Op 181) (A-B) anterior fragment, (A) dorsal, (B) ventral, (C) animal in tube.

Diagnosis Eyes absent; peristomial cirri present. Chaetiger 1 enlarged but not extending beyond peristomium; with auricular prechaetal lobes. Branchiae absent. Bidentate simple and pseudocompound hooks on chaetiger 1; pseudocompound hooks on chaetiger 2 and 3. Limbate chaetae and "scoop-shaped" pectinate chaetae from chaetiger 2. Subacicular hooks from chaetiger 9–11. Tube with thin transparent lining, covered closely with foraminiferans.

Taxonomic remark Nothria sp. 2 superficially resembles uncannily *N. abyssia* Kucheruk, 1978 and *N. paxtonae* Imajima, 1999, both reported from Australia (Paxton *et al.*, 2023). However, it differs greatly in having anterior hooks on three rather than two pairs of anterior parapodia and "scoop-shaped" rather than flat pectinate chaetae, possibly representing a new species.

Distribution IOT, Seamounts off Cocos (Keeling) Islands Territory, Muirfield Seamount, 2889–2923 m

Ecology and life history Unknown.

Family Opheliidae

***Ophelina* sp. 1**

Figure 25. *Ophelina* sp. 1. NMV F271104 (Op 151) entire animal

Diagnosis A single specimen, 15 mm long, 1.2 mm wide, 31 chaetigers. Lateral and ventral grooves continue for full body length, prostomium blunt with palpode. All chaetigers except the first with cirriform branchiae nearly as long as body width anteriorly and posteriorly, lateral eyespots not visible. Mid-body parapodia, branchiae and chaetae short, inconspicuous. Anal tube short, about equal to last 2 chaetigers, with faintly crenulate margin, only 1 anal cirrus visible.

Taxonomic remarks The blunt prostomium is unusual for the genus (and appears undamaged, not squashed or distorted). No eyespots are visible but they are perhaps faded. The blunt prostomium and relatively small number of chaetigers suggests that this is different from those *Ophelina* species currently known from Australian waters (Neave & Glasby, 2013; Wilson *et al.*, 2003).

Distribution IOT, seamounts off Christmas and Cocos (Keeling) Islands (3053–3144 m).

Ecology and life history Deposit feeder.

Ophelina sp. 2

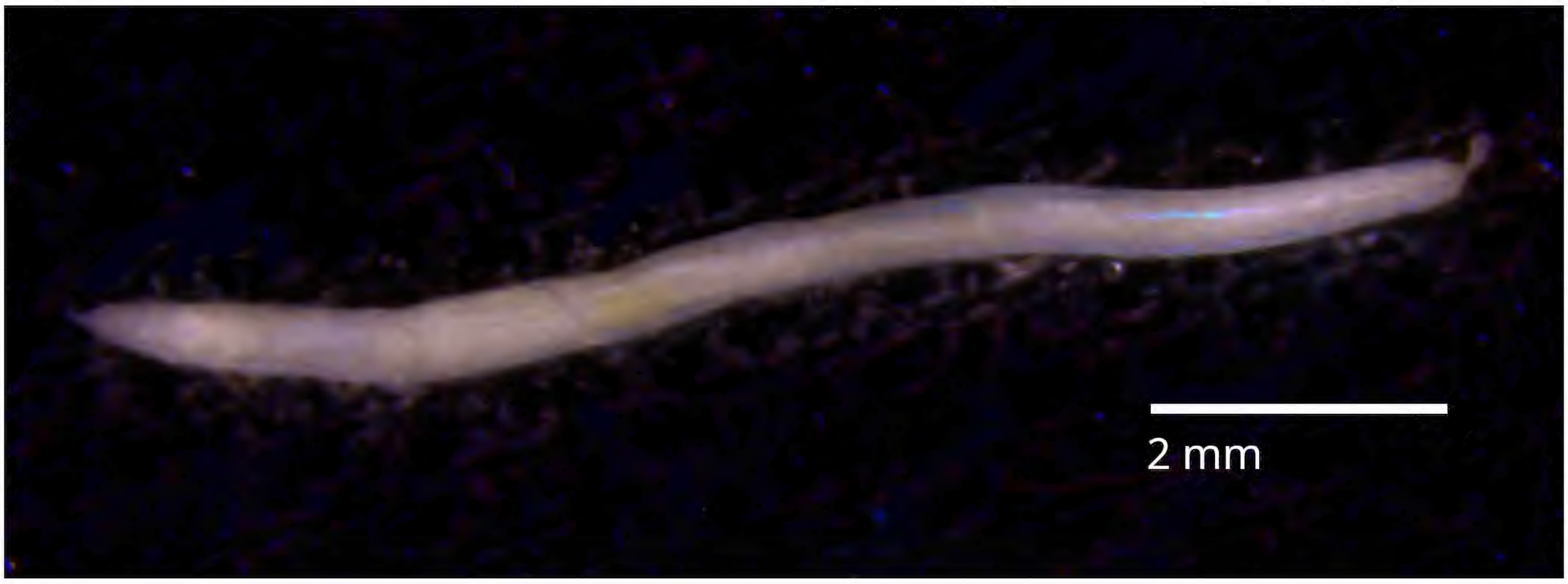

Figure 26. *Ophelina* sp. 2. NMV F271128 (Op 126) entire animal

Diagnosis Two specimens, 8–11 mm long, 0.5 mm wide, 25–26 chaetigers. Chaetigers not well defined, lateral and ventral grooves full body length, prostomium conical with long narrow tip, parapodia, branchiae and chaetae short and barely visible throughout, final 2-3 chaetigers of body tapering quickly to anal funnel. Anal funnel short (partly detached), cirri not visible.

Taxonomic remarks This OTU differs from the previous *Ophelina* OTU based on the long conical prostomium. Although *Ophelina* species are morphologically conservative (Neave & Glasby, 2013) the strongly tapered posterior end and having only 25–26 chaetigers suggests that this differs from currently known Australian members of the genus (Neave & Glasby, 2013; Wilson *et al.*, 2003).

Distribution IOT, seamounts off Christmas and Cocos (Keeling) Islands (808–8222 m).

Ecology and life history Deposit feeder.

Family Polynoidae

Admetella sp.

Figure 27. *Admetella* sp. AM W.54493 (Op 157) (A-B) entire animal (A) dorsal, (B) ventral, (C), anterior end, dorsal.

Diagnosis Specimens damaged, elytra missing. Body up to 65 segments. Cephalic peaks absent. Eyes absent or without pigment. Palps long, smooth, tapering. Median antenna ceratophore large, projecting dorsally from prostomium (style missing); lateral antennae ceratophores continuous with anterolateral margins of prostomium (styles missing). Paired auxiliary appendages arising from base of median antennal ceratophore, as elongate processes basally wide and tapering to elongate tips. Facial tubercle present, bulbous. Tentaculophores achaetous, but with small digitiform acicular lobe. Nuchal fold present on dorsum of segment 2. Elytra at least 25 pairs; elytrophores on segments 2, 4, 5 then every second segment, distribution changing posteriorly; distribution on every third segment after segment 32. Dorsal tubercles as long ridges on cirrigerous segments. Parapodia as long as or longer than width of body. Notopodia shorter than neuropodia, both with elongate acicular lobes. Notochaetae numerous where present, most missing or broken; notochaetae flattened laterally with faint spinous rows along margins, tips short, blunt and undivided. Neurochaetae numerous, flattened, transparent with faint spinous rows down both margins, tips short, triangular, often split laterally, appearing flattened and furcate, and divided into 2 short triangular flaps.

Taxonomic remarks The specimens belong to the subfamily Admetellinae due to the terminal position of the lateral antennae on the prostomium and the dorsal displacement of the median antenna. They resemble the genus *Admetella*, due to the presence of diagnostic auxiliary appendages, which arise from the base of the median antenna (*sensu A. longipedata* McIntosh, 1885), rather than from the bases of the lateral antennae, and are elongate as opposed to "short, scale-like" (*A. hastigerens* Chamberlin 1919; *A. longipedata sensu* Pettibone 1967). Our specimens differ from the two other genera of the Admetellinae due to the absence of long tentacular sheaths (compare *Bathyadmetella*) and the number of segments (*Bathymoorea* is short-bodied, with up to 33), as well as also possessing notochaetae (both *Bathyadmetella* and *Bathymoorea* lack notochaetae). There are three nominal species of *Admetella*, but these specimens do not accord with any of these, due to the elongate form of the auxiliary appendages arising from the median antenna, compared with the "short, scale-like" processes arising from the bases of lateral antennae (*A. longipedata* McIntosh 1885 *sensu* Pettibone 1967; *A. brevis* Levenstein, 1978) or connecting the median and lateral antennae (*A. hastigerens* Chamberlin, 1919).

Distribution *Admetella* spp. are widely reported from the Southern Ocean (McIntosh, 1885; Levenstein, 1978), Pacific Ocean (Chamberlin, 1919; Pettibone, 1967; Fauchald, 1972; Uschakov, 1982), Atlantic (Fauvel, 1953); Indian Ocean (Fauvel, 1953), 1000–5700 m. IOT, Cocos (Keeling) Territory, Muirfield Seamount and Santa Ridge (1019–1325 m).

Ecology and life history Active carnivores.

Anotochaetonoe michelbhaudi Britayev & Martin, 2006

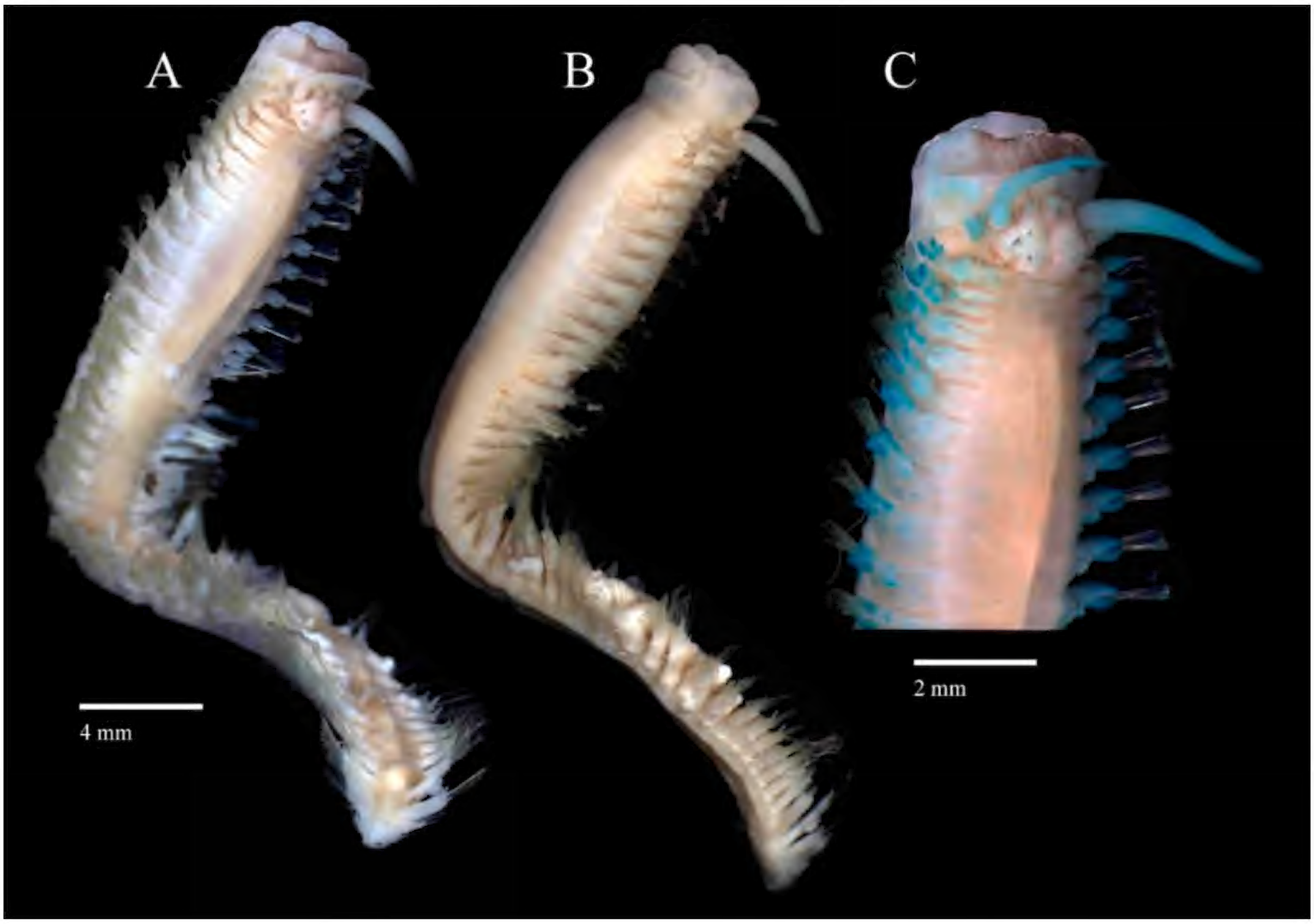

Figure 28. *Anotochaetonoe michelbhaudi*. AM W.53397 (Op 005) (A-B) entire animal (A) dorsal, (B) ventral, (C) anterior end, stained, with pharynx partially everted.

Diagnosis Body up to 60 segments. Cephalic peaks absent. Eyes present. Median antenna ceratostyles elongate, smooth. Lateral antennae prostomial location terminal, continuous with lateral margin of prostomium; lateral antennae ceratostyles elongate, evenly tapering, smooth. Tentaculophores without chaetae. Tentacular cirri elongate, evenly tapering; without papillae. Elytra delicate, up to 20 pairs, on segments 2, 4, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 26, 29, 32, 34, 37, 40, 43, 46; leaving middle of dorsum uncovered. Elytra surface ornamented with sparse micropapillae; macrotubercles absent; elytra surface with light brown pigmentation arranged in polygonal units in anterior part of elytron. Dorsal tubercles absent or indistinct. Dorsal cirri styles evenly tapering, smooth. Parapodia subbiramous. Notopodia achaetous, reduced to digitiform lobe. Neuropodia deeply incised dorsoventrally; ventral margin with 4–8 ciliated globular papillae between ventral cirrus and base of neuropodium. Neuropodial prechaetal and postchaetal lobe subequal; prechaetal supra-acicular process absent. Notochaetae absent. Two kinds of neurochaetae, both with long transverse rows of spines: superior ones more slender, tapering to nearly filiform, simple, knobbed tips; middle and inferior neurochaetae stouter with curved bidentate tips, secondary tooth slender and small.

Taxonomic remarks Monotypic genus. Some variability has been reported in the form of the superior neurochaetae and the number of ventral globular papillae (Ravara *et al.*, 2016). The specimens herein possess more segments (up to 57) than previously reported by Britayev & Martin (2006, up to 47 segments) and Ravara *et al.* (2016, up to 32 segments).

Distribution East Atlantic from Gulf of Cadiz to off Republic of Congo (70–228 m). IOT, Christmas Island and Cocos (Keeling) Island Territory (463–997 m).

Ecology and life history Commensal in tubes of chaetopterid polychaetes (Britayev & Martin, 2006; Ravara *et al.*, 2016).

***Bathyeliasona* sp. 1**

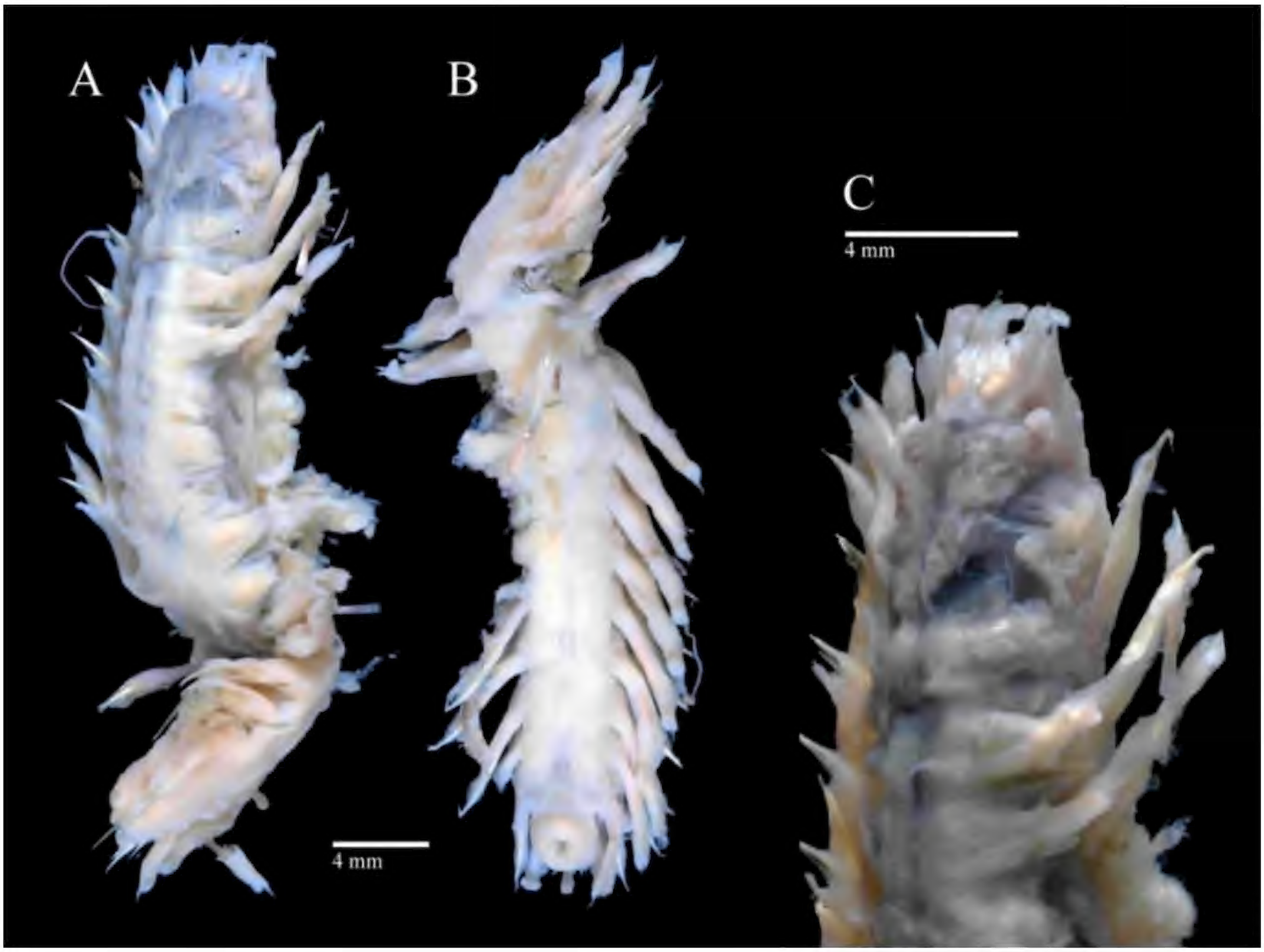

Figure 29. *Bathyeliasona* sp. 1. AM W.54492 (Ops 106). (A-B) entire animal (A) dorsal, (B) ventral, (C) anterior end, dorsal.

Diagnosis Specimens damaged, elytra missing. Body 17–18 segments, with slate-black pigmentation. Cephalic peaks and eyes absent. Median antenna present, ceratophore large, ceratostyle smooth. Lateral antennae absent. Frontal filaments present on anterior margin of prostomium. Tentaculophores with chaetae. Tentacular cirri without papillae. Two pairs of jaws present; pharynx with 9 pairs of terminal papillae. Dorsal tubercles absent or indistinct. Nephridial papillae small or few sometimes enlarged. Dorsal cirri styles papillated. Elytra 8 pairs; prominent elytrophores on segments 2, 4, 5, 7, 9, 11, 13, 15. Parapodia subbiramous, longer than body width; notopodia shorter than neuropodia. Notochaetae may be more stout or more slender and narrower than neurochaetae. Notochaetae with numerous spinous rows along shaft, with blunt, bare tips. Neurochaetae shaft expanded, flattened with a broad knife-like blade, serrated on margins; neurochaetae tips simple, triangular.

Taxonomic remarks The badly damaged specimens likely belong to *Bathyeliasona nigra* (Hartman, 1967). *Bathyeliasona* (Pettibone, 1976) comprises four species distinguished by eight pairs of elytra; tentaculophores with chaetae; lateral antennae absent; frontal filaments present; prostomium anterior margin comprising a pair of acute anterior projections. The genus includes four species occurring widely in the Atlantic, Pacific, and Indian Oceans, 2500–8000 m.

Distribution The Indian, Pacific and Atlantic Oceans (2500–5000 m). IOT, off Christmas and Cocos (Keeling) Islands - Rudist Seamount, Investigator Ridge Abyssal (3780–4990 m).

Ecology and life history Active carnivores.

Gorgoniapolynoe [?]

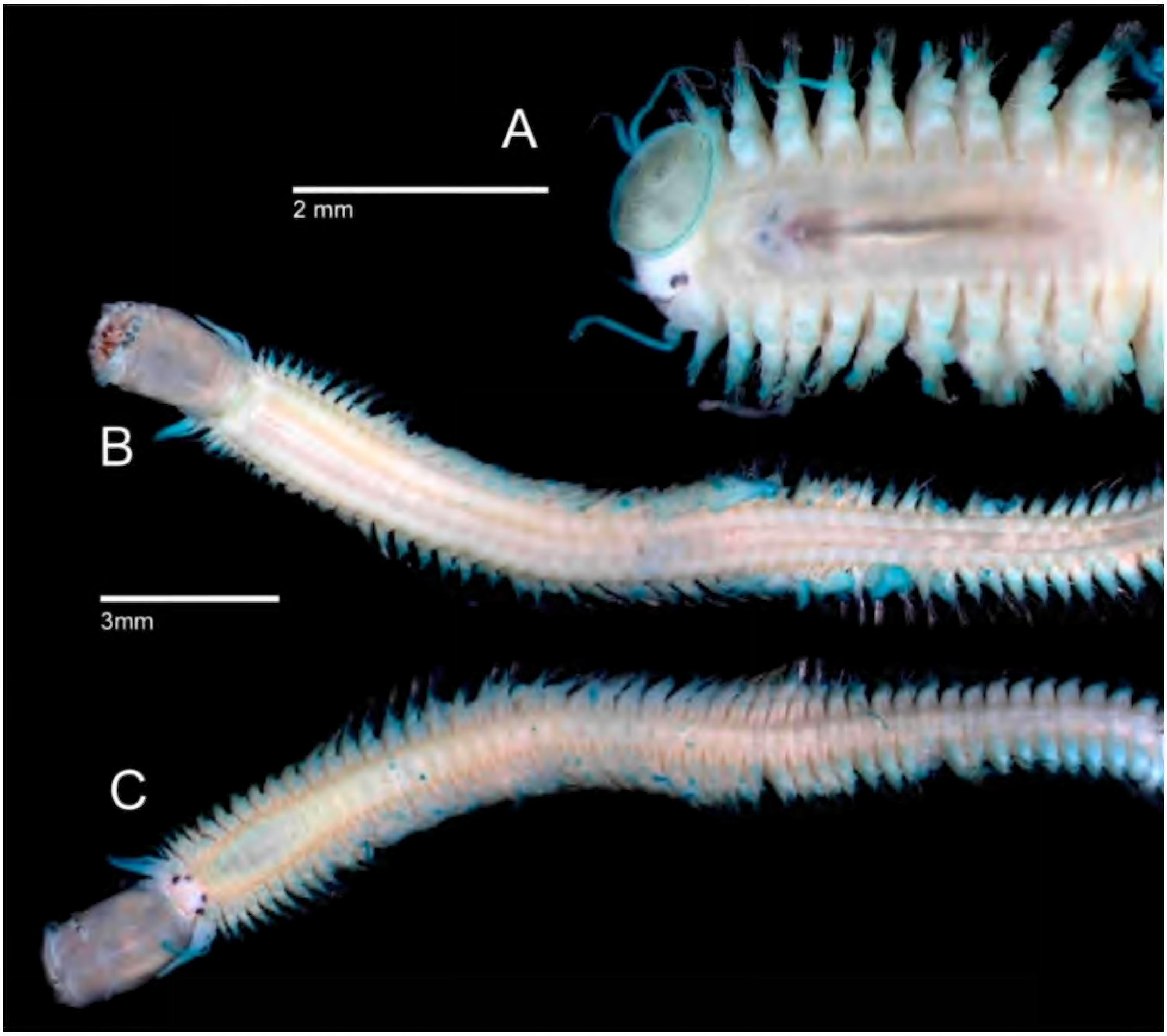

Figure 30. *?Gorgoniapolynoe* sp. (A) AM W.53413 (Op 009) 2, (A) anterior end, dorsal, elytron attached. (B-C) AM W.53413 entire animal stained with pharynx everted, (B) ventral, (C) dorsal.

Diagnosis Complete specimens with 40–68 segments. Cephalic peaks absent. Prostomium wider than long. 2 pairs of large eyes. Palps stout, short. Lateral antennae short, arise somewhat ventral to prostomial lobes, widely separated from median antenna; median antenna much longer, ceratostyles smooth. Tentaculophores achaetous. Dorsal cirri longer than parapodia, tapering, smooth. Dorsal tubercles nodular. Ventral cirri tapering, shorter than neuropodial lobe (except on segment 2), without papillae, arising mid-neuropodium. 15 pairs of elytra; elytrophores present on 2, 4, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 26, 29, 32. First pair of elytra covering dorsum, modified, with large translucent, chitinous central area, surface covered with robust microtubercles, round to cone-shaped, with scattered short cylindrical papillae, and thin, narrow, non-chitinous borders. Remaining elytra thin, small, fragile, not covering mid-dorsum, without microtubercles or papillae, faint pigment around elytral scar. Parapodia biramous, notopodia only slightly smaller than neuropodia. Neuropodial supra-acicular lobe present as elongate flap. Notochaetae as thick as neurochaetae. Notochaetae of 2 kinds: most smooth, except for a few notochaetae on anterior face of notopodia which have a few faint rows of short spines (10–11 notochaetae). Neurochaetae with swollen subdistal sections and faint rows of spines, straight or slightly curved (superior) to strongly hooked (middle

and inferior), with blunt unidentate tips; bidentate or notch-tipped neurochaetae absent.

Taxonomic remarks These specimens most resemble species of the genus *Gorgoniapolynoe* because of the large number of body segments, the presence and form of a pair of chitinised elytra on segment 2, and their association with gorgonian corals. However, because all nine nominal *Gorgoniapolynoe* spp. possess bidentate or notch-tipped neurochaetae, which our specimens do not, we cannot confidently ascribe them to this genus. Another genus associated with antipatharian corals which possesses similar chaetal forms is *Parahololepidella*, but none of the three species possess chitinised elytra.

Distribution IOT, Christmas Island, off McPherson Point (957–1154 m).

Ecology and life history *Gorgoniapolynoe* spp. colonise stylasterid and gorgonian corals, modifying the bases of polyps to form galls with open tunnels for passage, or inducing abnormal growth of branchlets which form covered protective tunnels for the worms (Pettibone, 1991; Barnich *et al.*, 2013; Britayev *et al.*, 2014).

Eunoe sp. 1

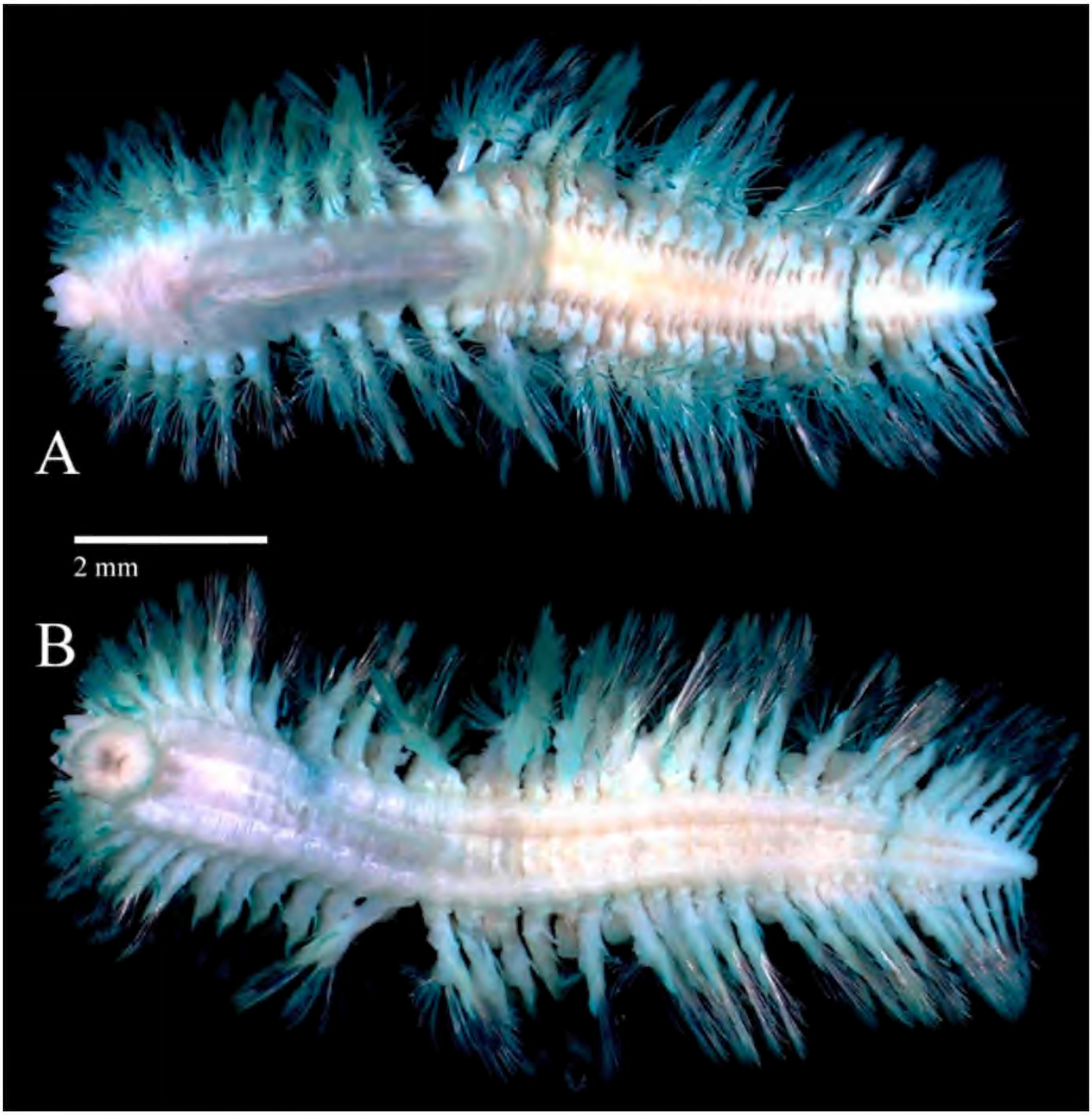

Figure 31. *Eunoe* sp. AM W.53477 (Op 046) entire animal stained, (A) dorsal, (B) ventral.

Diagnosis 36 segments, 15 pairs elytrophores on segments 2, 4, 5, 7, 9, 11, 13, 15, 17, 18, 21, 23, 26, 29, 32; all elytra missing. Eyes absent, cephalic peaks present. Lateral antennae arise ventral to prostomium and median antenna ceratophore. Antennae and ventral cirri all papillate (short sparse papillae, probably dorsal cirri also, but all missing). Tentaculophores with several chaetae. Dorsal tubercles present on all cirrigerous segments, nodular. Notochaetae thicker than neurochaetae, held in fascicles over the dorsum. Aciculae emergent. Neuropodial supra-acicular lobe absent. Notochaetae curved, with many rows of robust spines along most of length. Neurochaetae more slender than notochaetae, with filiform unidentate tips and many rows of spines along shaft.

Taxonomic remarks *Eunoe* is a speciose genus widely distributed in deep-sea habitats. Because all elytra are missing, the specimens are not identifiable to species.

Distribution IOT, seamounts off Christmas Island, Apollo Seamount, Balthazar Seamount (1237–1350 m).

Ecology and life history Active carnivores.

Harmothoe sp. 1

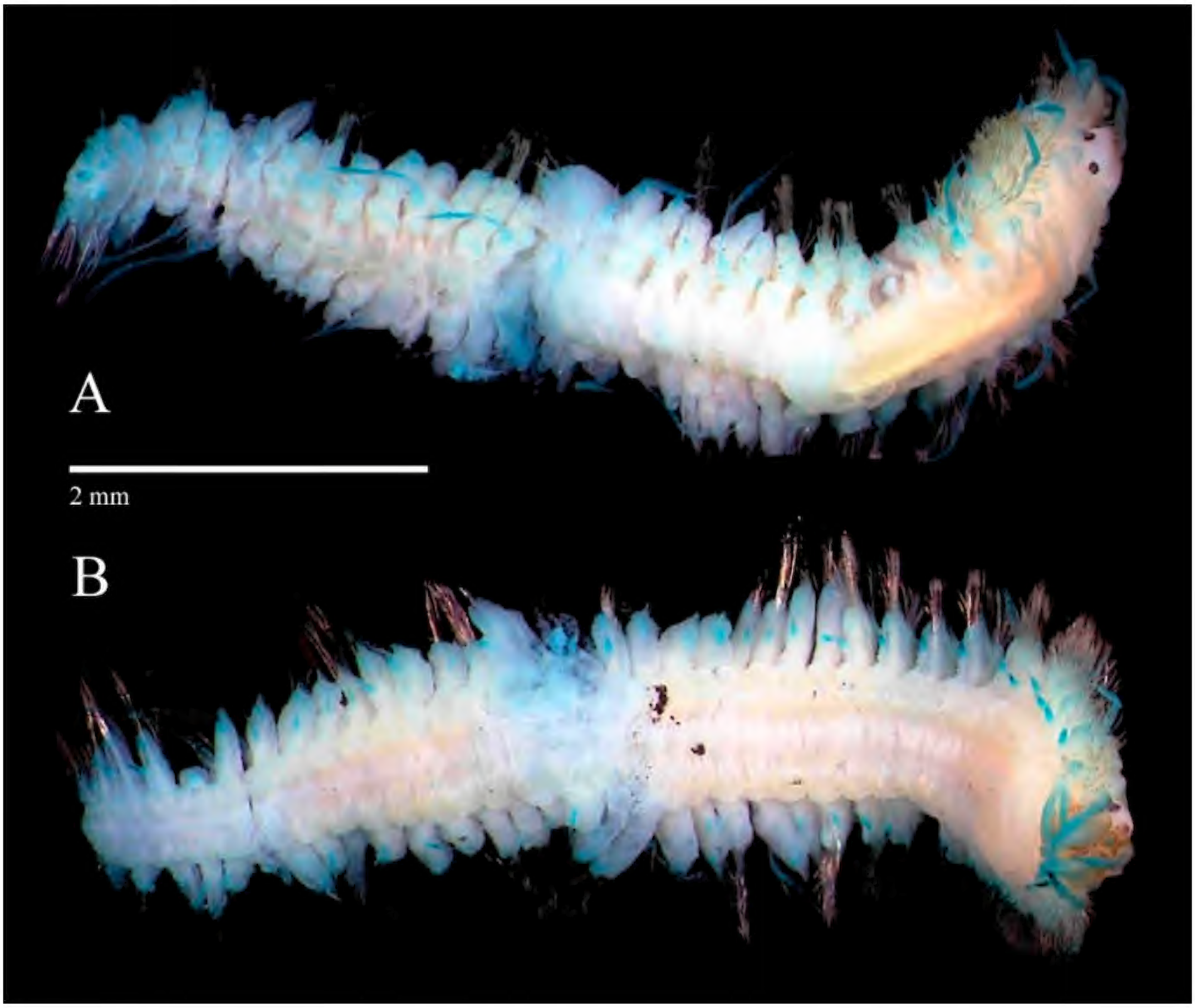

Figure 32. *Harmothoe* sp. 1. AM W.54608 (Op 179) entire animal stained, (A) dorsal, (B) ventral.

Diagnosis Small complete specimens (<15 mm long), up to 35 segments, 15 pairs of elytra on segments 2, 4, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 26, 29, 32. Anterior prostomium, palps and ventral lips with some brown pigment; cephalic peaks present; 2 pairs of black eyes, anterior pair oriented laterally, posterior pair oriented dorsally. Antennae and cirri styles with papillae; lateral antennae short, styles tapering. Facial tubercle absent, but upper lip mid-ridge enlarged as erect lobe. Tentaculophores with 0–3 chaetae. Ventral cirri arise mid-neuropodia. Dorsal tubercles present, nodular. Elytra surface with short, flattened, round to oblong microtubercles on inner and anterior areas; graduating into larger cylindrical microtubercles on middle, posterior and lateral areas of elytra—these cylindrical microtubercles with distal crown of 2–5 teeth; micropapillae present on lateral and posterior margins; some brown pigment on microtubercles on posterior half of elytra. Notopodia smaller than neuropodia; neuropodia with truncate subacicular lobe and digitiform supra-acicular lobe; aciculae emergent. Notochaetae as thick as or thicker than neurochaetae. Notochaetae with multiple rows of spines and short bare pointed tips. Neurochaetae with many rows of robust spines distally, tips long, broad, bidentate, with long fine secondary tooth subdistally.

Taxonomic remarks *Harmothoe* spp. are widely distributed in the deep-sea habitats world-wide; the genus is speciose and mostly undocumented in the Indian Ocean deep waters.

Distribution IOT, seamounts off Cocos (Keeling) Islands, Muirfield Seamount (111–808 m).

Ecology and life history Active carnivores.

Harmothoe sp. 2

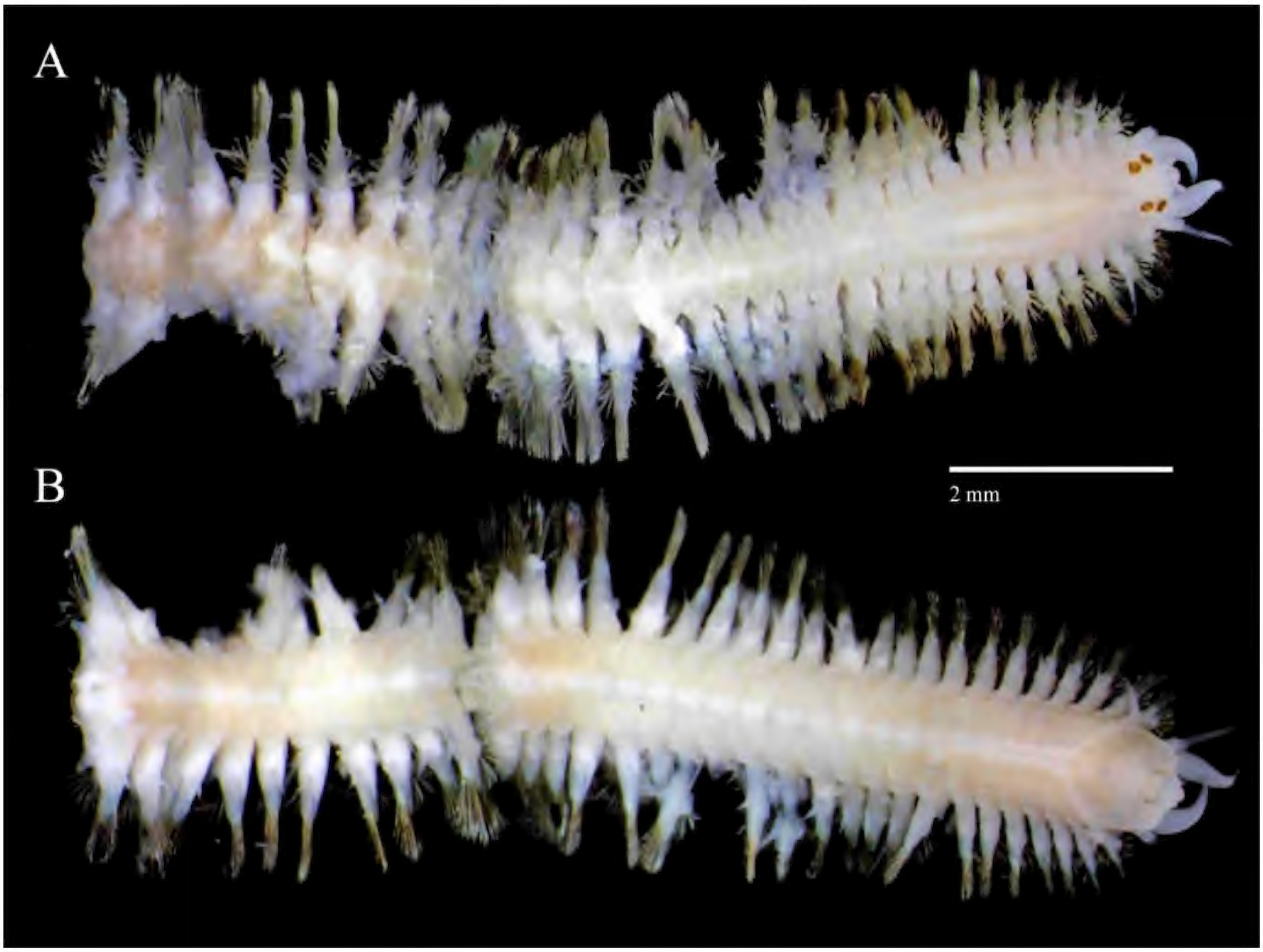

Figure 33. *Harmothoe* sp. 2. AM W.54502 (Op 138) entire animal, (A) dorsal, (B) ventral.

Diagnosis Incomplete specimens, with at least 34–37 segments, all elytra missing, at least 15 pairs of elytrophores. Unpigmented. Cephalic peaks present. 2 pairs of eyes present, anterior pair oriented dorsolaterally, posterior pair oriented dorsally. Median antenna ceratophore in anterior notch of prostomium, style missing; lateral antennae short, styles tapering, papillate. Tentaculophores with chaetae, tentacular cirri styles smooth. Dorsal cirri with styles tapering evenly, sparsely papillate. Ventral cirri smooth, arise mid-neuropodia. Dorsal tubercles present, nodular. Facial tubercle absent. Notopodia slightly smaller than neuropodia; neuropodia with digitiform supra-acicular lobe; aciculae either non-emergent or broken off at tip of noto- and neuropodia. Notochaetae thicker than neurochaetae. Notochaetae with multiple rows of spines, with long bare pointed tips. Neurochaetae slender with few rows of long spines on swollen shaft (distal third), tips long, bare, bidentate, secondary tooth very short; tips appear asymmetrically notched.
Taxonomic remarks *Harmothoe* spp. are widely distributed in the deep-sea habitats world-wide. Because all elytra are missing, this specimen cannot be identified to species.
Distribution IOT, off Cocos (Keeling) Islands (648–674 m).
Ecology and life history Active carnivores.

***Harmothoe* sp. 3**

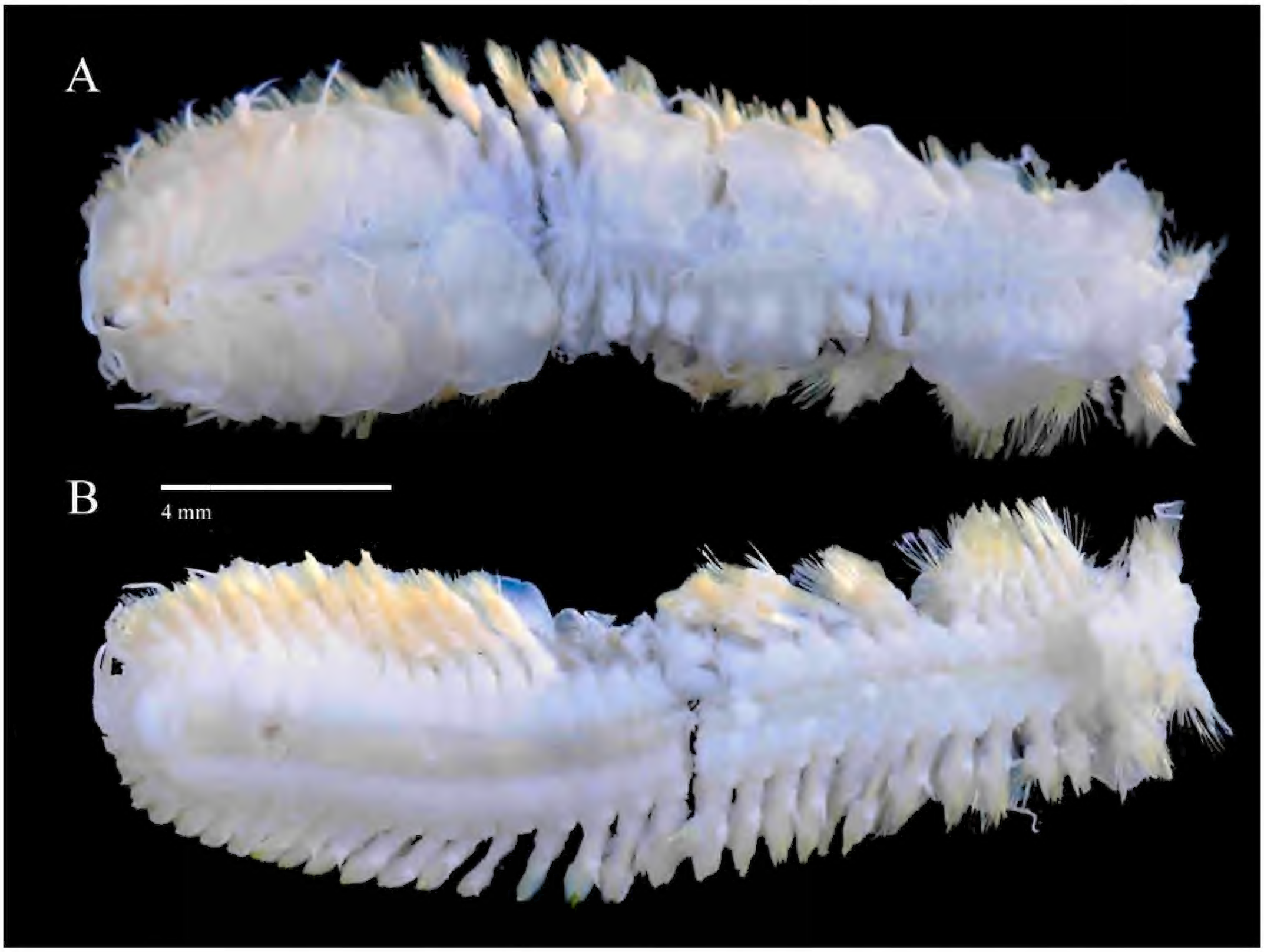

Figure 34. *Harmothoe* sp. 3. AM W. 54353 (Op 113) entire animal, (A) dorsal, (B) ventral.

Diagnosis Specimens unpigmented, up to 40 segments. 15 pairs of elytra. Cephalic peaks present, located near lateral margin of anterior prostomium. Eyes absent. Median antenna present, style papillated; lateral antennae short, styles basally inflated, with filamentous tapering tips, papillated, ceratophores with some brown pigment. Tentaculophores with chaetae; tentacular styles with papillae. Facial tubercle absent. Dorsal cirri styles long, tapering, papillated. Ventral cirri smooth, arise mid-neuropodia. Dorsal tubercles present, bulbous. Elytra 15 pairs, covering dorsum, thin, with few soft marginal papillae and microtubercles covering entire surface, some longer spines on posterior and external areas, with some in-between-length spines or cone-shaped tubercles. Notopodia slightly smaller than neuropodia, notoaciculae emergent. Neuropodial supra-acicular lobe absent. Notochaetae thicker than neurochaetae. Notochaetae numerous, with multiple rows of short spines, tips long, blunt. Neurochaetae numerous, with rows of spines, tips bidentate, secondary tooth long.
Taxonomic remarks *Harmothoe* spp. are widely distributed in the deep-sea habitats world-wide; the genus is speciose and mostly undocumented in the Indian Ocean deep waters.
Distribution IOT, seamounts off Christmas Island, Lucia and Scrooge Seamounts, off Cocos (Keeling) Islands, Investigator Ridge (1936–4990 m).
Ecology and life history Active carnivores.

Harmothoe sp. 4

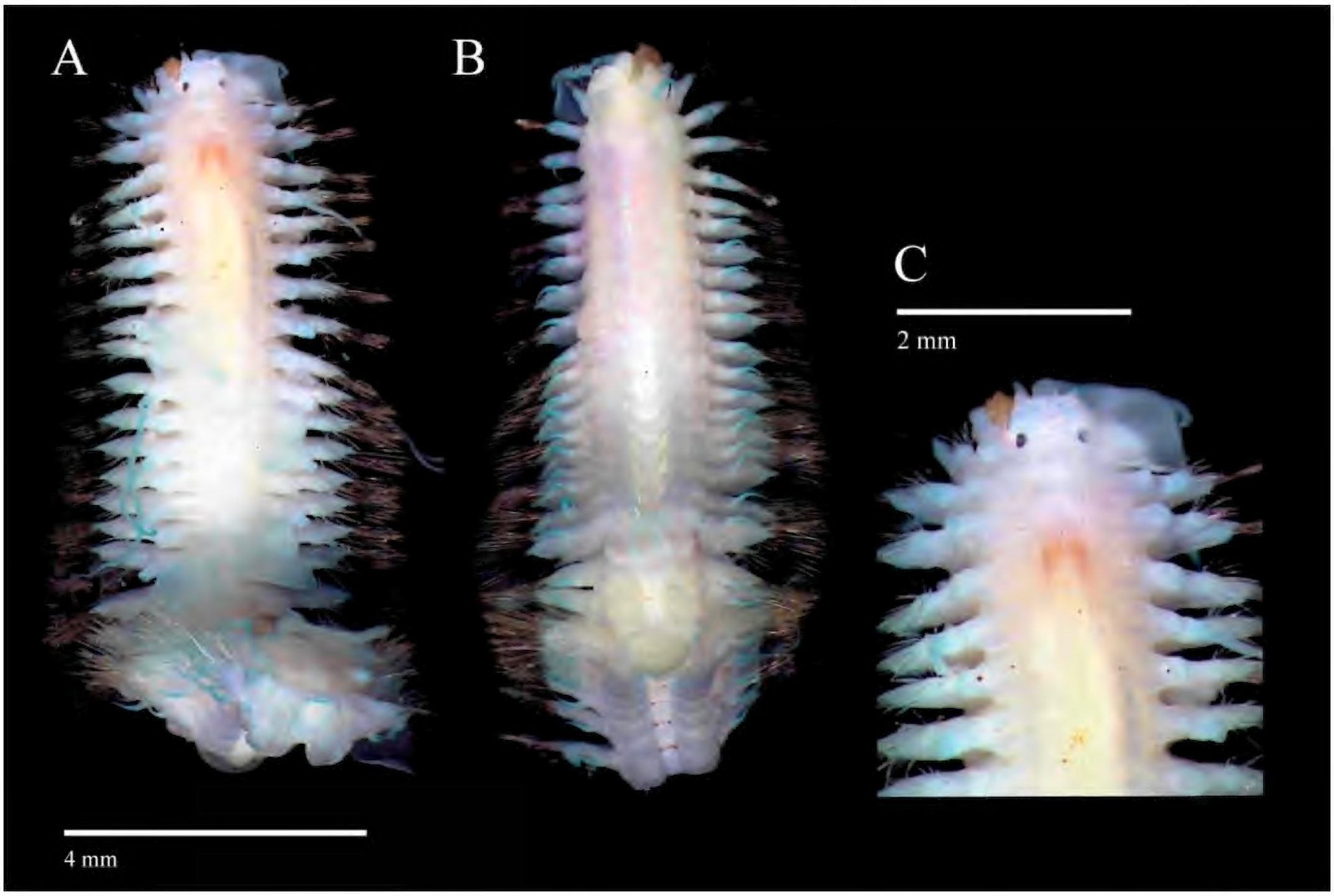

Figure 35. *Harmothoe* sp. 4. AM W.54362 (Op 176) (A-B) entire animal stained, (A) dorsal, (B) ventral, (C) anterior end with elytron, dorsal.

Diagnosis Specimens incomplete with 37–49 segments, 15 pairs elytra. Body robust, some scattered brown pigment spots on ventrum and dorsum. Cephalic peaks present. 2 pairs of eyes, anterior pair at widest part of prostomium, oriented laterally, posterior pair oriented dorsally. Antennae and cirri all with sparse papillae; lateral antennae short, styles tapering, papillated. Tentaculophores with chaetae. Dorsal tubercles present, nodular. Ventral cirri as long as or longer than neuropodium, papillated, tips filamentous. Notopodia shorter than neuropodia; neuropodia with short, digitiform supra-acicular lobe, aciculae emergent. Notochaetae as thick as neurochaetae; notochaetae with transverse rows of spines almost to tip, tips long, pointed. Neurochaetae with transverse rows of spines, tips wide and bidentate, secondary tooth short, resembling an asymmetrical "notch". Elytra surface covered with round to conical microtubercles and some short and long papillae; elytral margin with few short papillae.

Taxonomic remarks Differs from *Harmothoe* sp. 1 by the different shape of neurochaetal tips and elytral ornamentation and from *Harmothoe* sp. 2 by the form and shape of eyes, length of bare tips of noto- and neurochaetae, and form of ventral cirri. *Harmothoe* is a speciose genus mostly undocumented in Indian Ocean deep sea.

Distribution: Indian Ocean, Australia, Christmas Island Territory, Balthazar Seamount. Depth range: 2298–2435 m.

Ecology and life history: Active carnivores.

Harmothoe sp. 5

Figure 36. *Harmothoe* sp. 5. AM W.54836 (Op 163) entire animal stained, (A) dorsal, (B) ventral.

Diagnosis Single specimen, 37 segments, prostomium with 2 pairs of pale eyes present, anterior eyes located at widest part of prostomium, oriented laterally, slightly larger than posterior eyes. Lateral antennae short, styles papillated, pigmented. Median antenna style missing, ceratophore large. Tentaculophores with chaetae, styles missing. All elytra missing; 15 pairs elytrophores on segments 2, 4, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 26, 29, 32. Parapodia sub-biramous, notopodia and neuropodia both with elongate lobes, notopodial lobe only slightly shorter than neuropodial lobe. Neuropodial supra-acicular lobe present, digitiform, short. Notochaetae stouter than neurochaetae. Notochaetae curved with many rows of fine spines on convex side, reaching to tip. Neurochaetae with transverse rows of long spines, tips bidentate, narrow, subdistal tooth fine. Dorsal cirri all missing. Ventral cirri arise mid-neuropodium, papillated.

Taxonomic remarks This specimen is similar to *Harmothoe* sp. 1 but differs from it by the form and orientation of eyes, the much longer elongate notopodial lobes, and the form of the neurochaetal tips. Because all elytra are missing, this specimen cannot be identified to species.

Distribution IOT, seamounts off Cocos (Keeling) Island, Muirfield Seamount (528 m).

Ecology and life history: Active carnivores.

Harmothoe sp. 6

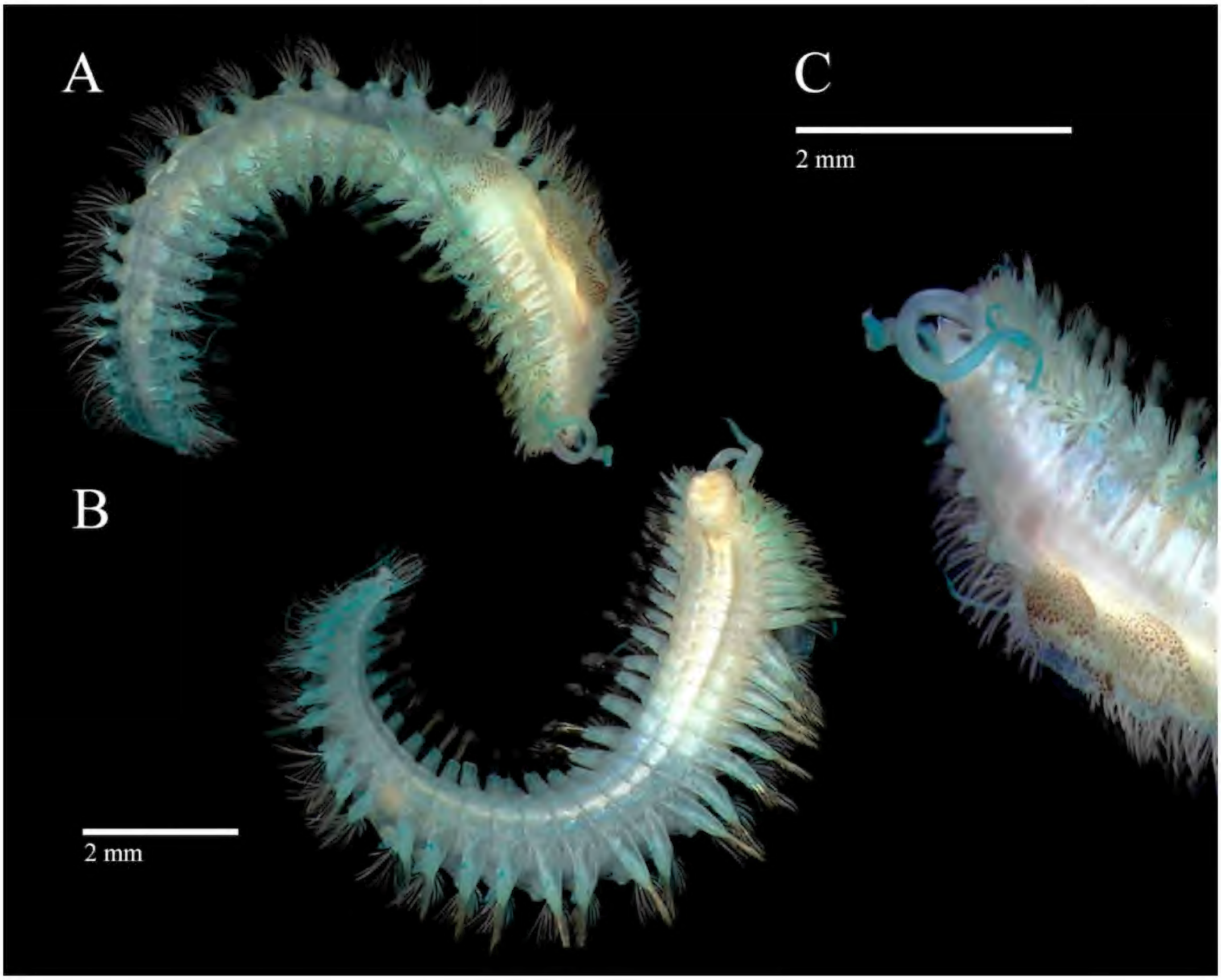

Figure 37. *Harmothoe* sp. 6. AM W.54349 (Op 170) (A-B) entire animal stained, (A) dorsal, (B) ventral, (C) anterior end with elytra, dorsal.

Diagnosis Small specimen, 38 segments. Antennae and cirri styles all papillated. Cephalic peaks present. 2 pairs of large pale eyes. Some brown pigment on anterior prostomium. Facial tubercle absent. 15 pairs elytra, on 2, 4, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 26, 29, 32. Elytra surface covered with round microtubercles and grading into larger globular macrotubercles covered with very fine spines/teeth; brown pigment present on and around microtubercles. Parapodia with notopodia smaller than neuropodia, aciculae emergent. Neuropodial subacicular lobe present, digitiform. Notochaetae thicker than neurochaetae. Notochaetae with many rows of robust spines reaching to blunt tip. Neurochaetae with swollen shaft subdistally, with transverse rows of fine spines, and tips bidentate, secondary tooth fine, long.

Taxonomic remarks: This specimen is similar to *Harmothoe* sp. 1 but differs from it by the form of elytral ornamentation. *Harmothoe* spp. are relatively undocumented in the deep-sea habitats of the Indian Ocean.

Distribution IOT, seamounts off Cocos (Keeling) Islands, Muirfield Seamount (271–311 m).

Ecology and life history Active carnivores.

Polynoinae gen. sp. 1

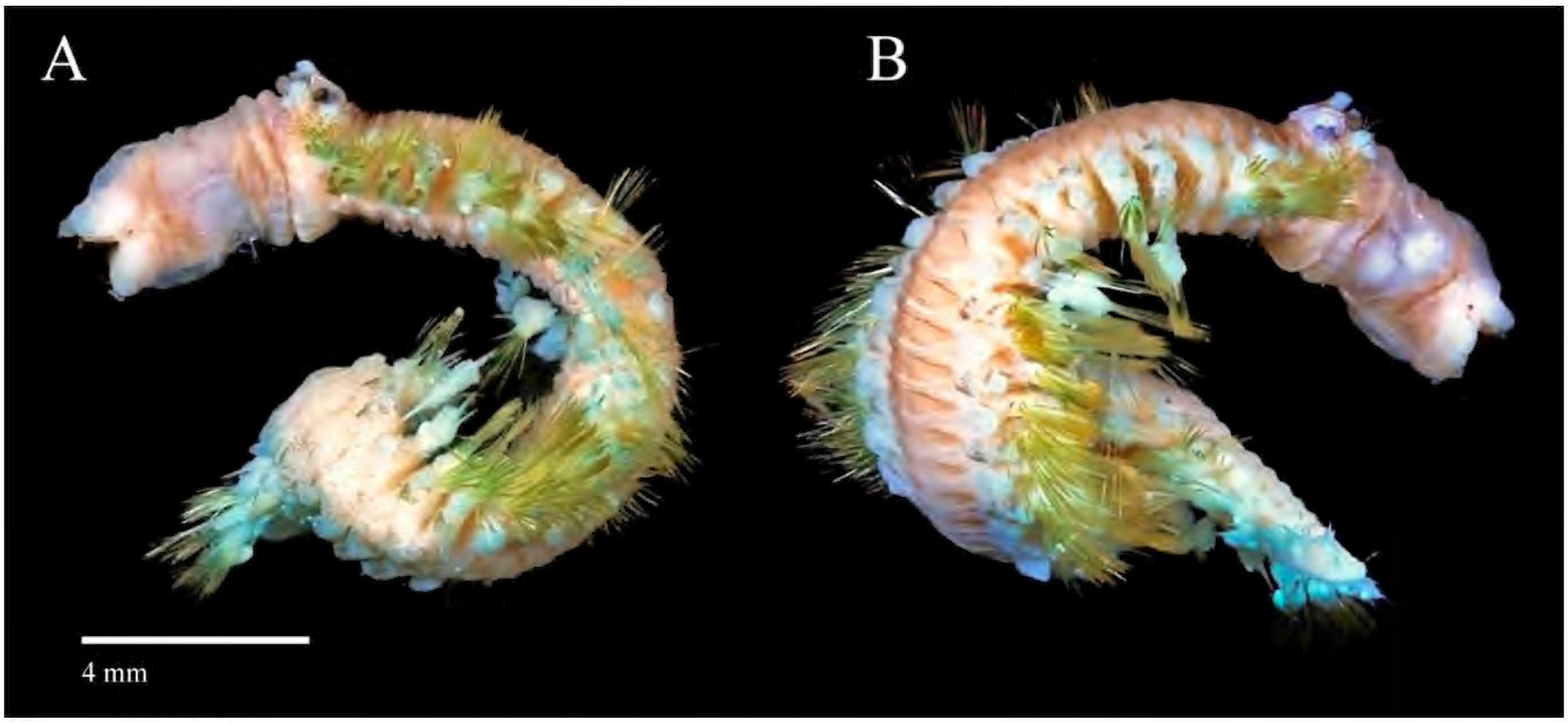

Figure 38. *Polynoinae* gen. sp. 1. AM W.54501 (Op 147), entire animal stained and pharynx everted, (A) left lateral, (B) dorsal.

Diagnosis Single complete specimen, body robust with 43 segments, 17 pairs of elytrophores, all elytra missing. Pigment present on prostomium and dorsum. Eyes present, anterior and posterior pairs overlapping. Cephalic peaks present, located towards anterolateral margin of prostomium. Tentaculophores with chaetae. Median and lateral antennae styles missing. Lateral antennae ceratophores located slightly ventral to median ceratophore (almost on same level). Tentacular styles missing. Facial tubercle present, large bulbous. Pharynx everted, 4 jaws (upper pair and lower pair each fused), 11 pairs terminal pharyngeal papillae. Dorsal tubercles present, as small, rounded flaps, on cirrigerous segments. Elytrophores present on 2, 4, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 26, 29, 32, 35, 36 (17 pairs). Notopodia and neuropodia with elongate lobes, notopodia shorter than neuropodia. Neuropodial supra-acicular lobe absent, aciculae emergent. Notochaetae thicker than neurochaetae. Notochaetae curved, with many transverse rows of spines, tips pointed. Neurochaetae with slightly swollen shaft midway, transverse rows of spines and slightly curved, bare, unidentate tips.

Taxonomic remarks This specimen does not accord with any genus or species currently described in the Polynoinae and is possibly new. As there is only a single damaged specimen missing all elytra, this is a tentative determination.

Distribution IOT, seamounts off Cocos (Keeling) Island, Muirfield Seamount (1459–1595 m).

Ecology and life history Unknown.

Family Serpulidae

***Apomatus* n. sp. 1**

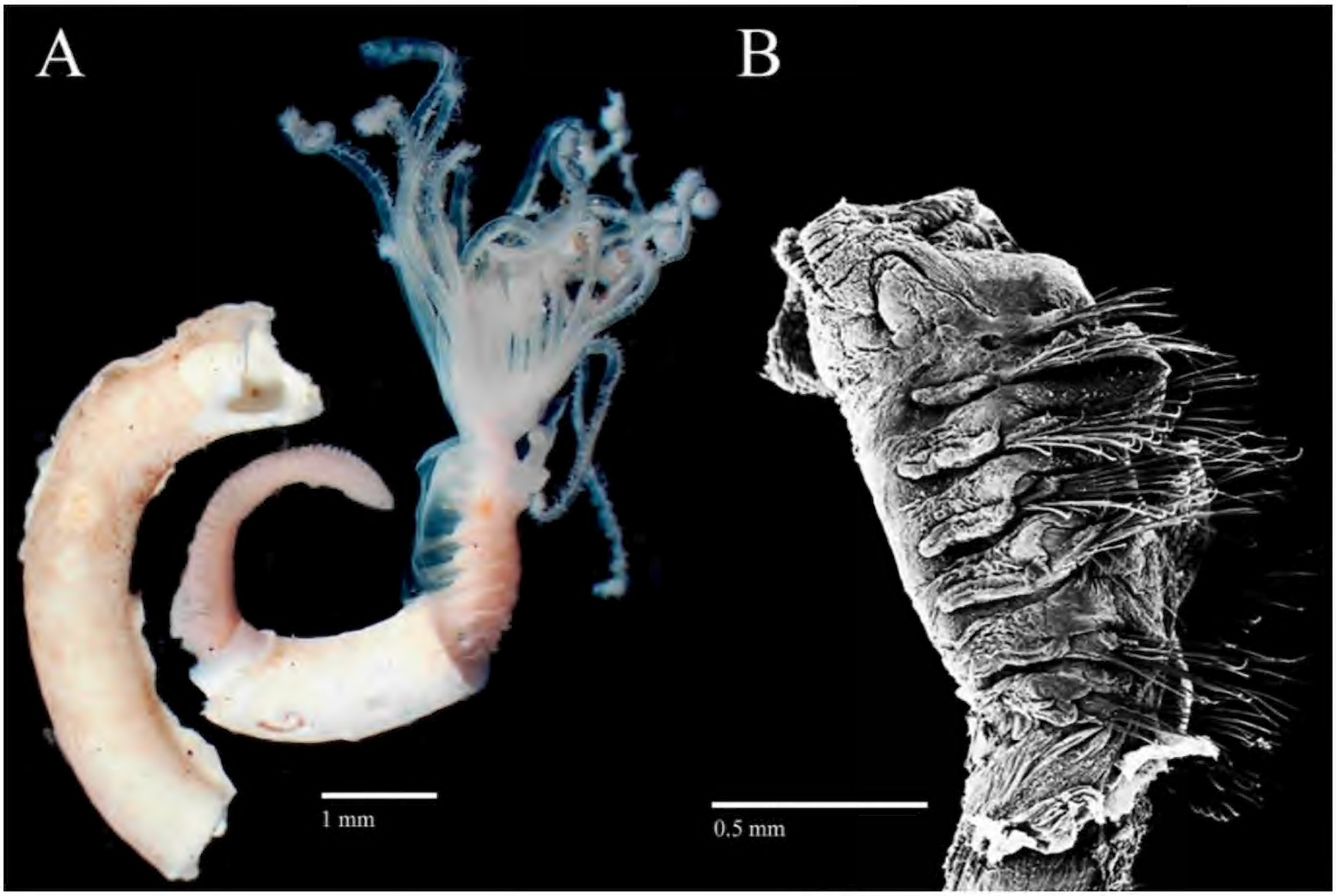

Figure 39. *Apomatus* n. sp. 1. AM W.54373 (Op 165) (A) animal with tube, (B) AM W.53423 (Op) thorax, left lateral.

Diagnosis Tube white opaque or slightly reddish, circular in cross section, attached to substrate throughout its length, with smooth surface, without either collar-like rings or flaring peristomes. Median keels absent. Radioles flat ribbon-like, wide; each lobe with up to 12 pairs of radioles, arranged in semicircles, basally connected by short inter-radiolar membrane for about 1/20 of their length. Operculum absent or lost, no distinct peduncle observed. Collar unlobed, with entire edge, short, barely covering radiolar lobes; continuous with wide thoracic membranes forming an apron across anterior abdominal chaetigers 1 or 2. Calcium-secreting glands visible on the collar.

Taxonomic remarks This species resembles *Apomatus voightae* Kupriyanova & Nishi, 2010 from Patton-Murray seamounts that differs from all other serpulids by its flat ribbon-like radioles. An unusual feature of *A. voightae* is the presence of Apomatus chaetae in the collar chaetae bundle. *Apomatus* chaetae are absent in the collar bundle of *Apomatus* n. sp. and operculum is also lacking in this species, but the soft vesicular opercula of this species are easily lost, so this character is unreliable. The species was recently described in Kupriyanova & Flaxman (2024).

Distribution IOT, seamounts off Christmas and Cocos (Keeling) Islands (932–1533 m).

Ecology and life history Tube-dwelling suspension feeder.

Bathyvermilia **n. sp. 1**

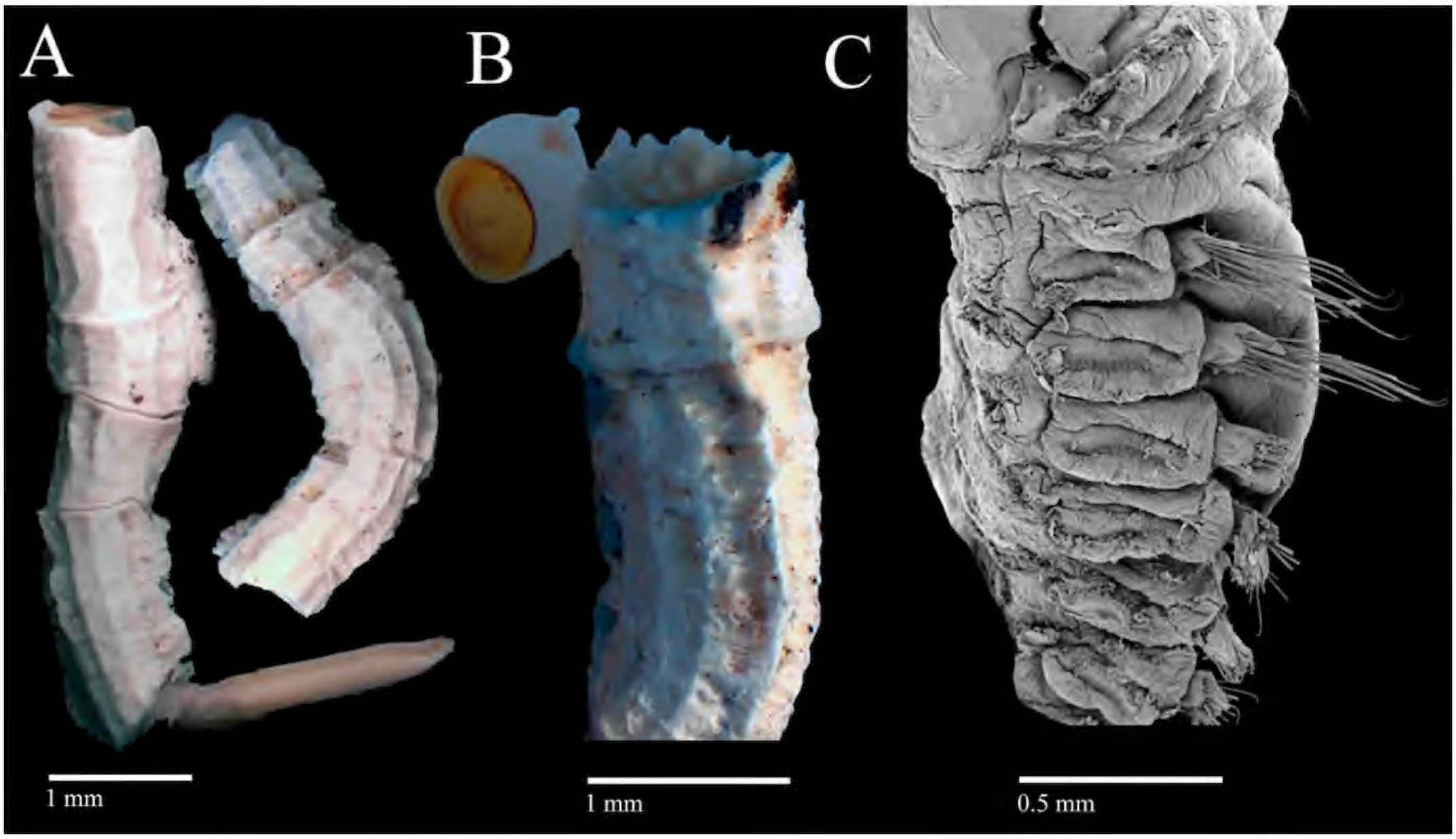

Figure 40. *Bathyvermilia* n. sp. 1. (A) AM W.53398 (Op 005) animal in tube, (B-C) AM W. 53398 (Op) (B) animal in tube with operculum, (C) thorax, left lateral.

Diagnosis Tubes white or slightly brownish, opaque, circular in internal in cross-section, attached to substrate throughout their length. Tube surface with numerous low keels and some occasional peristomes. Radioles: with 10–11 pairs of radioles arranged into semicircles. Peduncle smooth circular in cross-section, slightly thicker than normal radioles and inserted as a second radiole. Constriction at junction of basal part of the operculum and the peduncle present. Operculum semi-globular, with flat or slightly depressed chitinous endplate. Collar tri-lobed. Thoracic membranes continuing to thoracic chaetiger 5.

Taxonomic remarks The species is easily recognisable by its characteristic tube with numerous low keels and occasional transverse ridges/peristomes. The species was recently described in Kupriyanova & Flaxman (2024).

Distribution IOT, off Christmas Island (643–997 m).

Ecology and life history Tube-dwelling suspension feeder.

Bathyvermilia challengeri Zibrowius, 1973

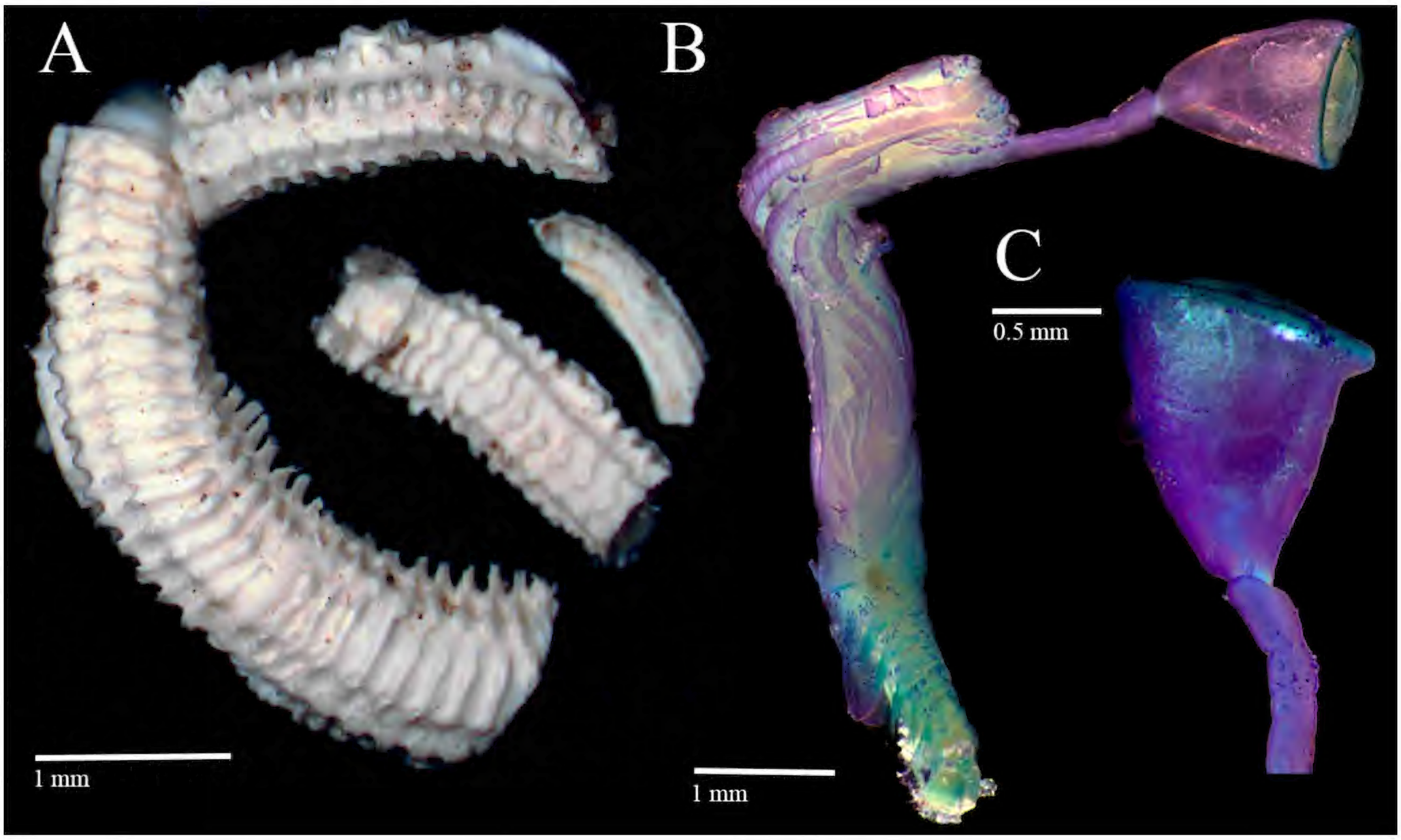

Figure 41. *Bathyvermilia challengeri*. AM W.53395 (Op 002) (A) tube fragments, (B), thorax with radioles and operculum, left lateral, stained (C) operculum, stained.

Diagnosis Very recognisable tubes with characteristic sculpture made of numerous transverse ridges close to each other (A). Thoracic membranes rounded, extending to 3rd thoracic segment (B). Operculum conical, covered with simple slightly raised chitinous endplate having distinct rims (B, C). Peduncle smooth cylindrical, constriction obvious (B, C).

Taxonomic remarks This species is easily recognisable by its very characteristic tube with numerous conspicuous transverse ridges (not anteriorly directed peristomes), positioned close to each other, encircling the tube interrupted by a longitudinal groove cutting transverse ridges near the base. The original records of this species came from three HMS "Challenger" stations in the North and South Pacific Ocean taken at 4246–5719 m. Most recently a specimen was collected in the Eastern Australian Abyss (Gunton *et al.*, 2021).

Distribution Mid-Pacific Ocean (4246–5719 m), Johnston Atoll, west of Hawaii (380 m); Eastern abyss off NSW, Australia (2562–2587 m); IOT, off Christmas Island (1225–1626 m).

Ecology and life history Tube-dwelling suspension feeder.

Filogranula stellata Southward, 1963

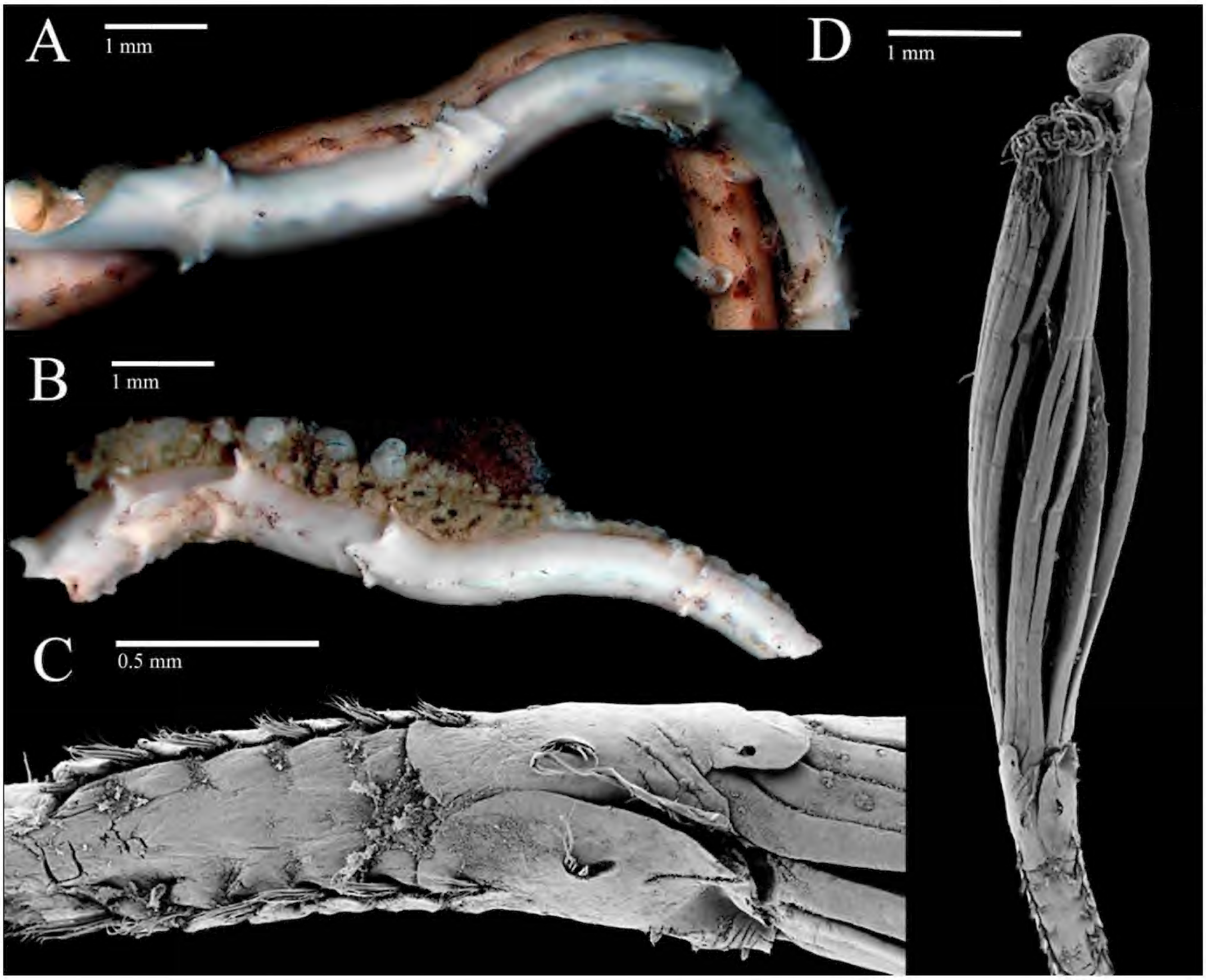

Figure 42. *Filogranula stellata*. (A) AM W.53462 (Op 031) animal in tube, (B) AM W.53461 (Op 031) animal in tube, (C-D) AM W.54390 anterior end (C) thorax, (D) radioles with operculum.

Diagnosis Tube white, opaque, with elaborate star-like peristomes; denticulate keel present. Operculum with chitinous concave endplate. Peduncle smooth cylindrical, without wings, gradually continues into operculum without constriction. Seven thoracic chaetigerous segments. Collar non-lobed with entire edge, continuous with short thoracic membranes, ending at second thoracic chaetiger.

Taxonomic remarks This poorly known species with a very characteristic tube with denticulate collars was originally described from Northern Atlantic. Kupriyanova & Nishi (2011) provided the first record of the species from the Pacific Ocean. Most recently, molecular phylogenetic tree of Kupriyanova *et al.* (2023) included sequences of a specimen from Lost City Hydrothermal field located on Mid-Atlantic Ridge. This study provided the first record of the species from the Indian Ocean.

Distribution North Atlantic Ocean, 320–1775 m; Pacific Ocean, 1600–1900 m; IOT (1113–3345 m).

Ecology and life history Tube-dwelling suspension feeder.

Protis n. sp. 1

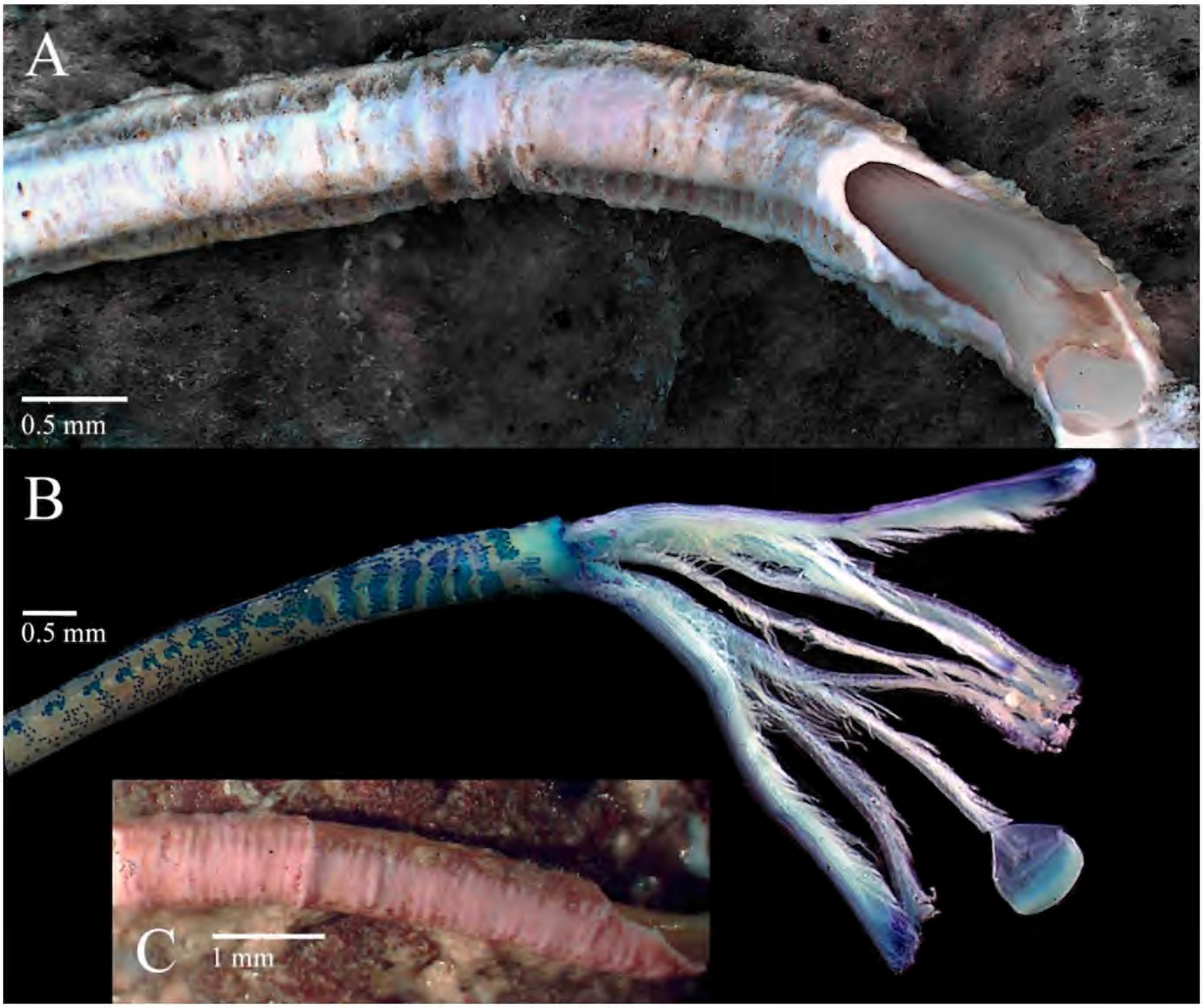

Figure 43. *Protis* n. sp. 1. (A-B) AM W.54485 (Op 143) (A) animal in tube, (B) anterior end removed from tube, lateral, stained, (C) AM W.53456 (Op) tube.

Diagnosis Tube pink, although tube colour ranges from nearly white, only slightly pinkish to distinctly pink, entirely opaque, circular in cross section, attached to substrate throughout its length. Tube surface with growth ridges and occasional narrow peristomes. Operculum membranous globular present on normal pinnulate radiole. Seven thoracic chaetigers. Collar trilobed with entire edge. Thoracic membranes short ending as rounded flaps at 3rd thoracic segment. Collar chaetae fin-and-blade and limbate. Apomatus chaetae present. Thoracic uncini saw-shaped with about 6 teeth, anterior fang simple pointed.

Taxonomic remarks The species is clearly different from the rest of the genus *Protis* by the distinctly pinkish tube. It was recently described by Kupriyanova & Flaxman (2024).

Distribution IOT, seamounts off Christmas and Cocos (Keeling) Islands, Indian Ocean (1113–3839 m).

Ecology and life history Tube-dwelling suspension feeder.

Protis **n. sp. 2**

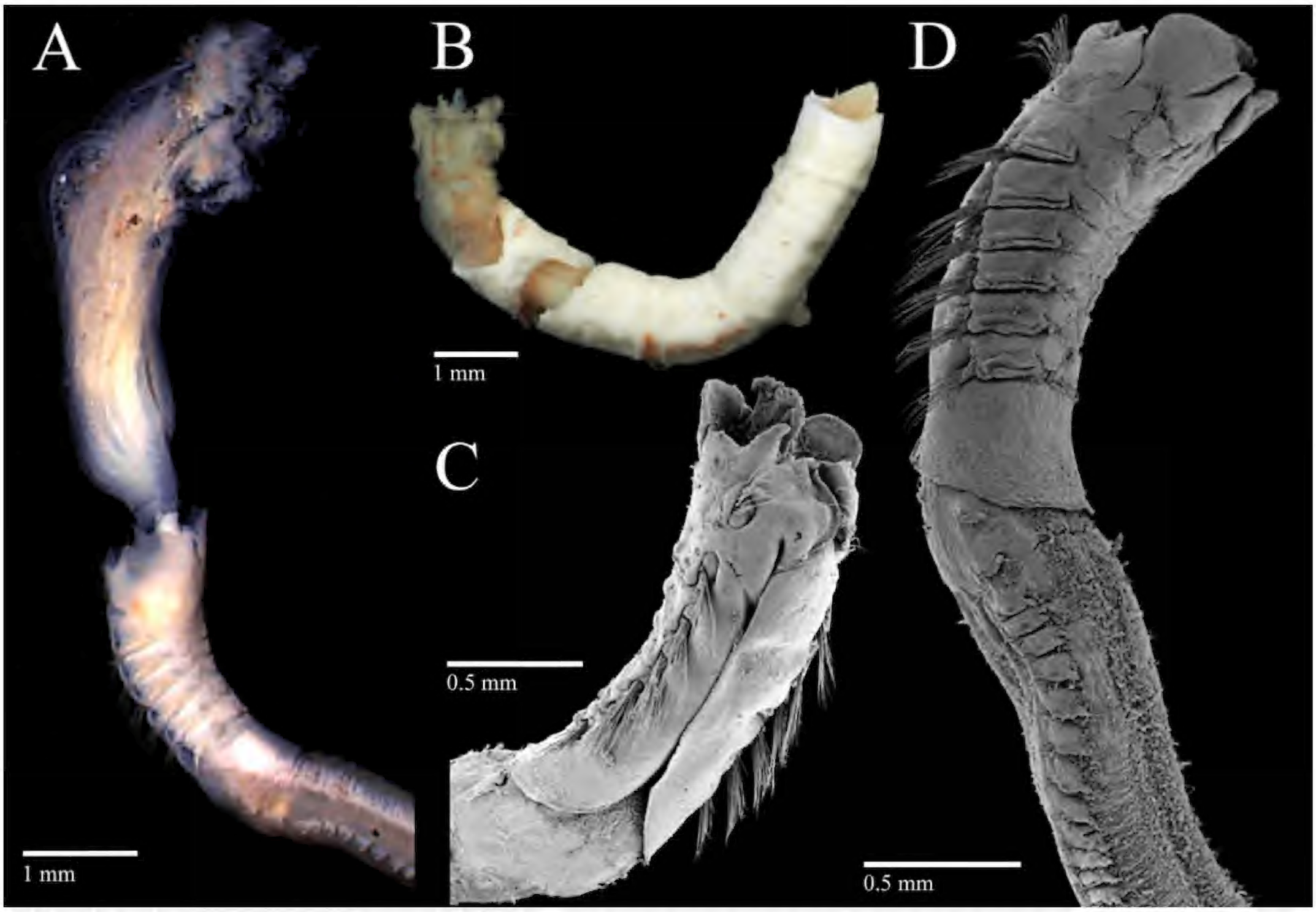

Figure 44. *Protis* n. sp. 2. AM W.53467 (Op 035) (A) anterior end, (B) animal in tube, (C) thorax, dorsal, (D) thorax, left lateral.

Diagnosis Tube white, opaque, without peristomes. Operculum absent or lost. Seven thoracic chaetigers. Collar trilobed with entire edge. Thoracic membranes long ending as long ventral apron across anterior abdominal segments. Collar chaetae fin-and-blade and limbate. Apomatus chaetae present. Thoracic uncini saw-shaped with about six teeth, anterior fang simple pointed. Triangular depression absent. Abdominal chaetae flat narrow geniculate with rounded teeth.

Taxonomic remarks The species differs from *Protis* sp. 1 by the absence of the operculum and long thoracic membranes. It was recently described by Kupriyanova & Flaxman (2024).

Distribution IOT, seamounts off Christmas and Cocos (Keeling) Islands, Indian Ocean (1237–1896 m).

Ecology and life history Tube-dwelling suspension feeder.

Hyalopomatus n. sp. 1

Figure 45. *Hyalopomatus* n. sp. 1. AM W.54412 (Op 120) (A) animal in tube, (B) AM W.54408 (Op) anterior end, left lateral, (C) AM W.55300 (Op) thorax, right lateral.

Diagnosis Tube white or slightly brownish opaque, with smooth surface, circular in cross-section, attached to substrate throughout its entire length. Operculum soft membranous, semi-transparent, semi-globular, with flattened top, slightly differentiated from the basal part; conspicuous constriction and additional small vesicular ampulla between operculum and peduncle, Peduncle thin, cylindrical, smooth. Six thoracic chaetigerous segments, 5 of which uncinigerous. Collar distinctly unlobed. Thoracic membranes short, ending at 2nd chaetiger. Thoracic uncini with multilobed pegs.

Taxonomic remarks *Hyalopomatus* n. sp. 1 has operculum with a differentiated endcap flattened at the top and distinctly unlobed collar. A very distinct character of the new species is the multilobed pegs of thoracic uncini because all other species of the genus have two-lobed pegs of such uncini. It was recently described by Kupriyanova & Flaxman (2024).

Distribution IOT, seamounts off Christmas and Cocos (Keeling) Islands (932–4047 m).

Ecology and life history Tube-dwelling suspension feeder.

Hyalopomatus n. sp. 2

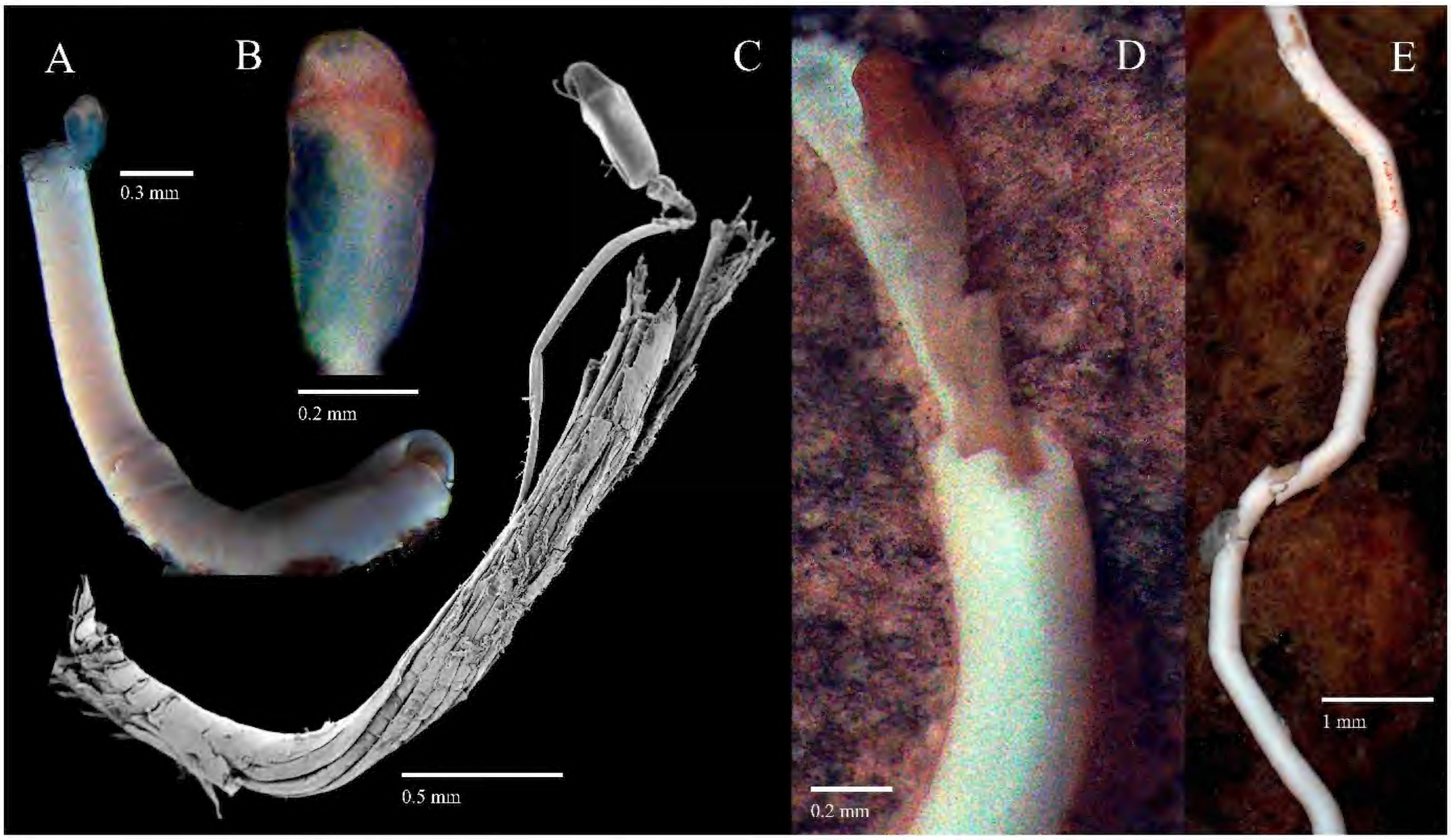

Figure 46. *Hyalopomatus* n. sp. 2. (A-C) AM W.54378 (Op) (A) tube with operculum, (B) operculum, (C) anterior end, lateral, (D) AM W.54369 (Op) animal within tube, (E) AM W.54392 (Op) tube.

Diagnosis Tube white opaque, with shiny surface, thin-walled, circular in cross-section, attached to substrate throughout entire length, no keels, peristomes or obvious transverse ridges or growth lines. Operculum soft membranous, semi-transparent, elongated with concave brown cap, distinctly differentiated from the basal part; conspicuous constriction and additional small vesicular ampulla between operculum and peduncle. Peduncle thin, cylindrical, smooth. Six thoracic chaetigerous segments, five of which uncinigerous. Collar long covering radiolar lobes, trilobed, with ventral lobe at least twice as long as lateral ones. Thoracic membranes short, ending at 2nd chaetiger. Thoracic uncini with bi-lobed pegs.

Taxonomic remarks The tiny new species is distinct by having elongate operculum covered with a darker distal cap and long collar. It was recently described by Kupriyanova & Flaxman (2024).

Distribution IOT, seamounts off Christmas and Cocos (Keeling) Islands (1113–4990 m).

Ecology and life history Tube-dwelling suspension feeder.

Hyalopomatus n. sp. 3

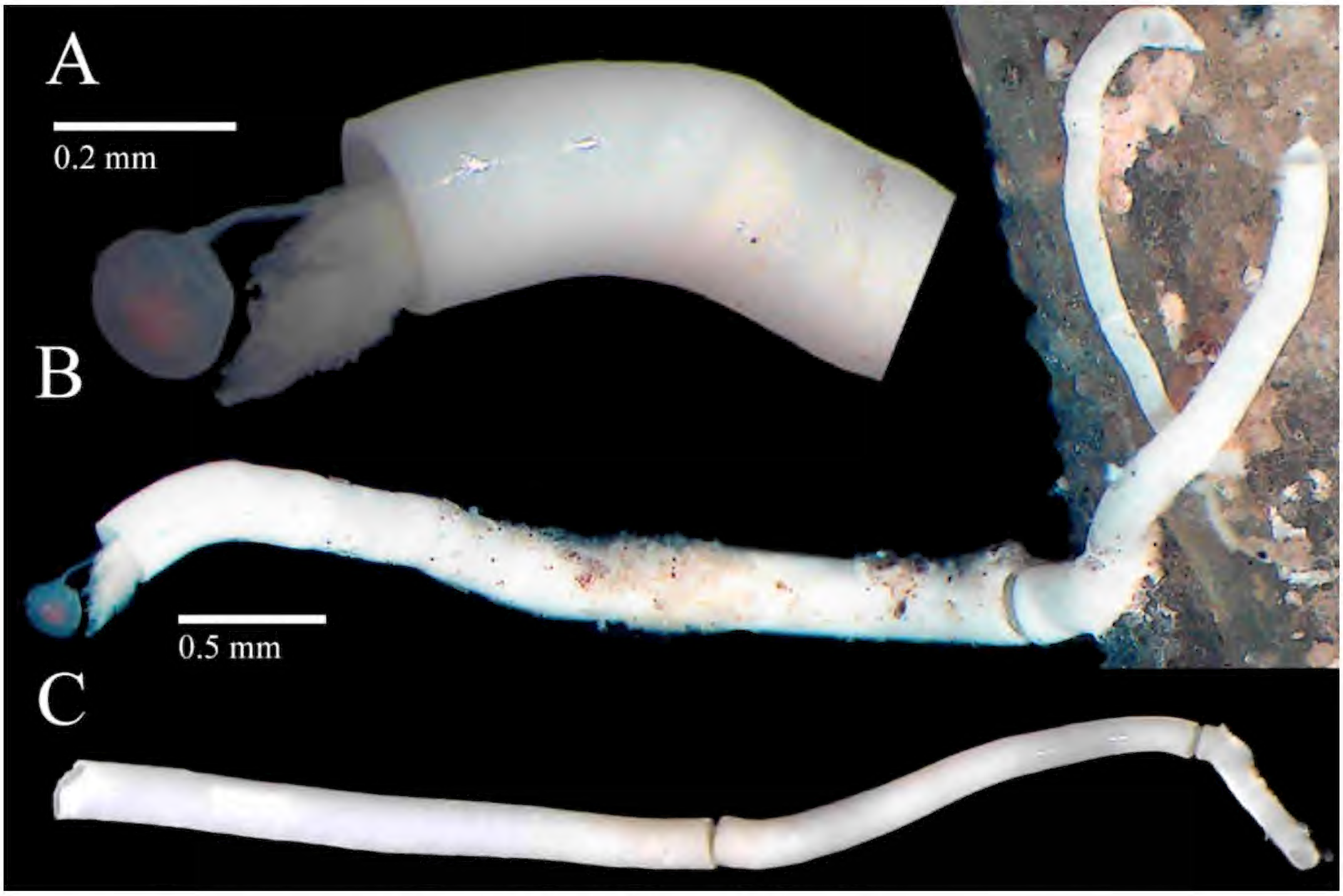

Figure 47. *Hyalopomatus* n. sp. 3. AM W.54438 (Op 136) (A) animal in tube, anterior end, (B) animal in tube, (C) tube.

Diagnosis Tube white opaque, with shiny surface, straight erect attached only by the posterior part to substrate, thin-walled, brittle, circular in cross-section, keels, and peristomes absent, breaks present. Operculum soft membranous, semi-transparent, distinctly globular, no distal cap; conspicuous constriction and additional small vesicular ampulla between operculum and peduncle absent. Peduncle thin, cylindrical, smooth. Six thoracic chaetigerous segments, five of which uncinigerous. Collar long, covering radiolar lobes, trilobed, with ventral lobe distinctly higher than the lateral. Thoracic membranes short, ending at 3rd chaetiger. Thoracic uncini with bi-lobed pegs.

Taxonomic remarks The species is characterised by distinctly globular operculum lacking any differentiated distal cap and straight, tube with smooth shiny surface. It was recently described by Kupriyanova & Flaxman (2024).

Distribution IOT, off Cocos (Keeling) Islands (754–890 m).

Ecology and life history Tube-dwelling suspension feeder.

Neomicrorbis azoricus **Zibrowius, 1972**

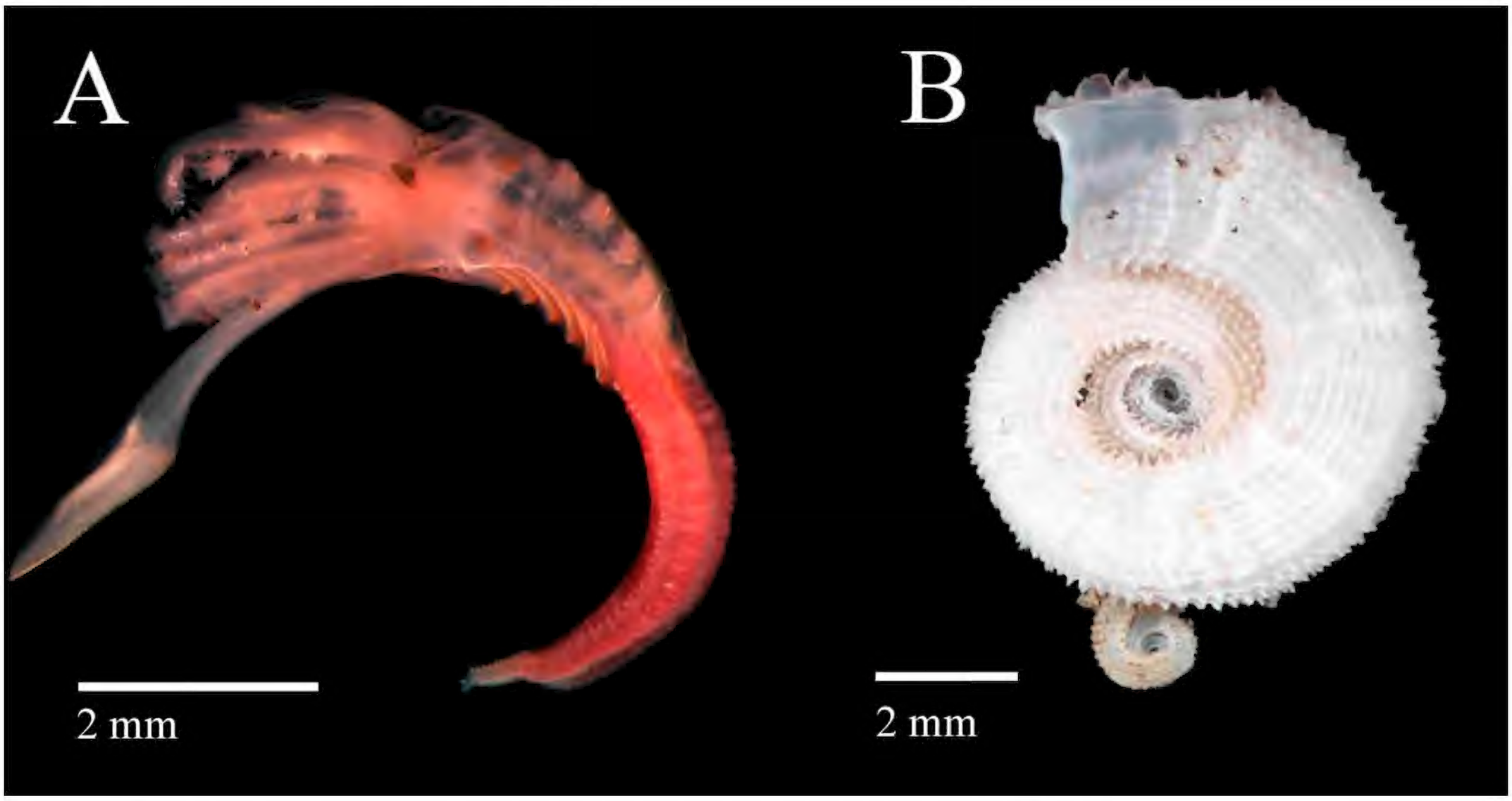

Figure 48. *Neomicrorbis azoricus*. AM W.54340 (Op 161) (A) animal removed from tube, (B) tube.

Diagnosis Flat spirally coiled tubes 5–10 mm in diameter presenting sinistrally and dextrally coiled specimens in approximately equal numbers. Tubes with longitudinal keels made of rows of small tubercules. Operculum with calcareous endplate and long talon extending into peduncle. Seven thoracic chaetigers on both sides, but chaetae on left and right are different. Collar trilobed. Thoracic membranes ending after second thoracic chaetiger.

Taxonomic remarks The species is easily recognisable by the typical tubes (larger than typical tubes of the subfamily Spirorbinae) with multiple rows of tubercules. Whether the single widely distributed species *Neomicrorbis azoricus* is found in Atlantic, Pacific, and Indian Oceans or multiple (cryptic?) species are involved needs to be examined with DNA sequence data (currently such data are available only for the IOT population, see Rouse *et al.* (2024).

Distribution Atlantic Ocean: off Azores; Indian Ocean: off Saint Paul, Réunion, Comores, Amirantes Islands. Pacific Ocean: off Wallis and Futuna Islands (327–1775 m). IOT, off Cocos (Keeling) Islands, Muirfield Seamount (808–811 m).

Ecology and life history Tube-dwelling suspension feeder. Likely to be a simultaneous hermaphrodite that brooding embryos, but the methods of incubation are unknown.

Placostegus sp. 1

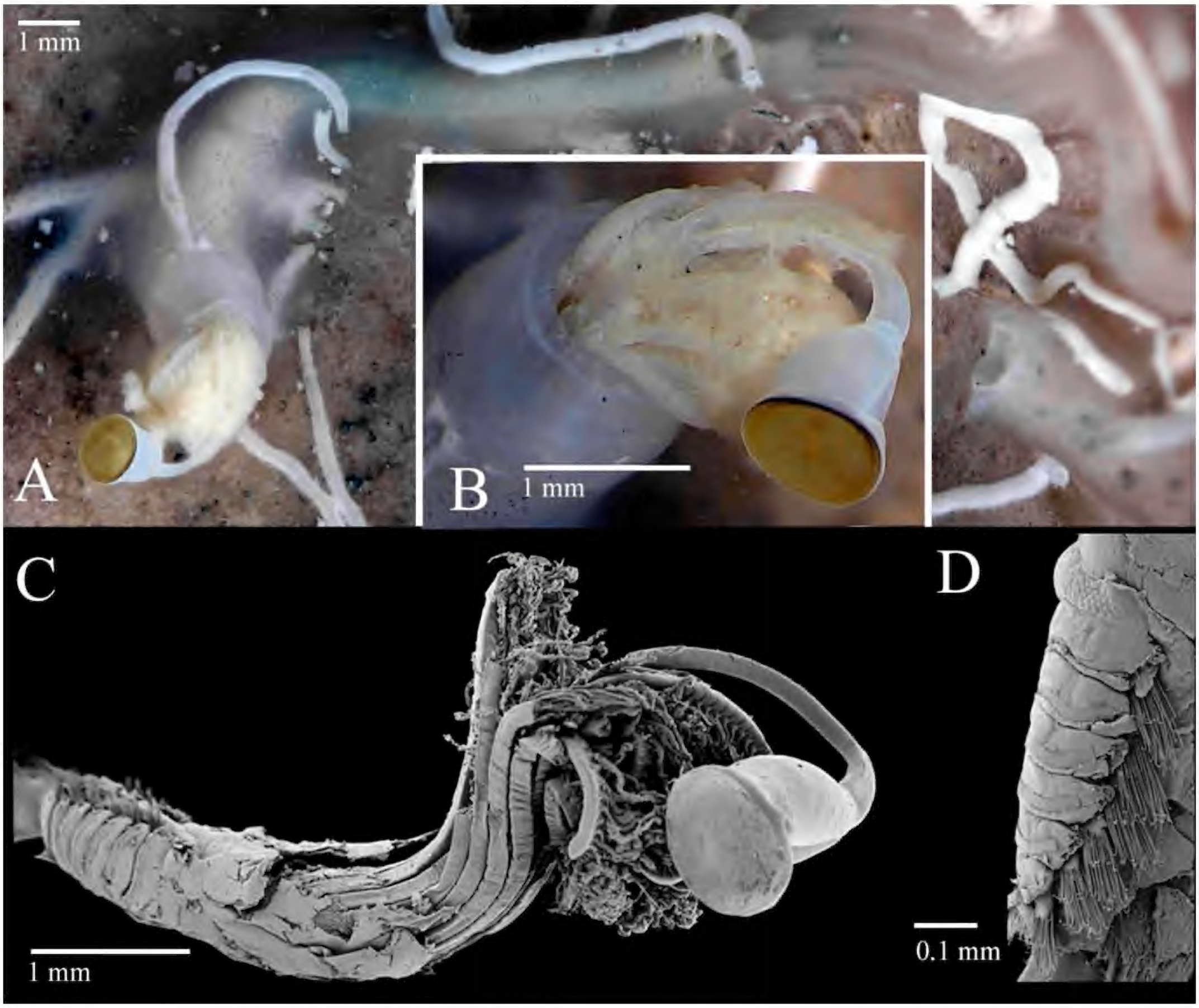

Figure 49. *Placostegus* sp. 1. AM W.54407 (Op 170) (A) animal in tube, (B) animal in tube, anterior end, (C) anterior end, left lateral, (D) thorax and ocelli.

Diagnosis Tubes triangular in cross section, thick-walled, nearly transparent (A, a). Tube attached to substrate for most of its length, only distal-most part free, tube mouth rounded, lacking any denticles. Operculum elongated inverted cone covered with a slightly concave brown chitinous endplate. Thorax short, compact, thoracic notopodia positioned close to each other, along mid-lateral line of thorax, triangular depression absent. Collar segment with girdle of red-pigmented ocelli.

Taxonomic remarks *Placostegus* and *Vitreotubus* (see below) are the only two serpulins with an entirely vitreous tube. *Placostegus* has one evident diagnostic autapomorphy—the belt of bright red ocelli in the region where in other genera collar chaetae are found (ten Hove & Kupriyanova, 2009, fig. 1F).

Distribution IOT, Muirfield Seamount, Cocos (Keeling) Islands (271–367 m).

Ecology and life history Tube-dwelling suspension feeder.

Vitreotubus digeronimoi Zibrowius, 1979

Figure 50. *Vitreotubus digeronimoi*. AM W.54409 (Op 163) (A) animal in tube, (B) entire animal removed from tube, ventral, (C) animal in tube, dorsal, stained.

Diagnosis Tube entirely vitreous, more or less quadrangular in cross-section by its two large undulating lateral keels, and with a median keel made of a row of teeth. Operculum inverse conical with chitinous diabolo-like endplate. Peduncle smooth, cylindrical, merging gradually into operculum, without wings. Seven thoracic chaetigerous segments. Collar trilobed. Medial lobe of collar separated from lateral lobes by deep incision, latter continuous with thoracic membranes extending all along the thorax, but narrow in the posterior segments, forming ventral apron.

Taxonomic remarks The monotypic genus was originally described from fossil records and recent material collected in the bathyal zone off the Azores and in the Indian Ocean (Zibrowius, 1979), more recent records are given by ten Hove (1994).

Distribution Central Atlantic and Indian Ocean; bathyal (500–1415 m). IOT (528 m).

Ecology and life history Tube-dwelling suspension feeder.

Family Terebellidae

***Eupolymnia* sp. 1**

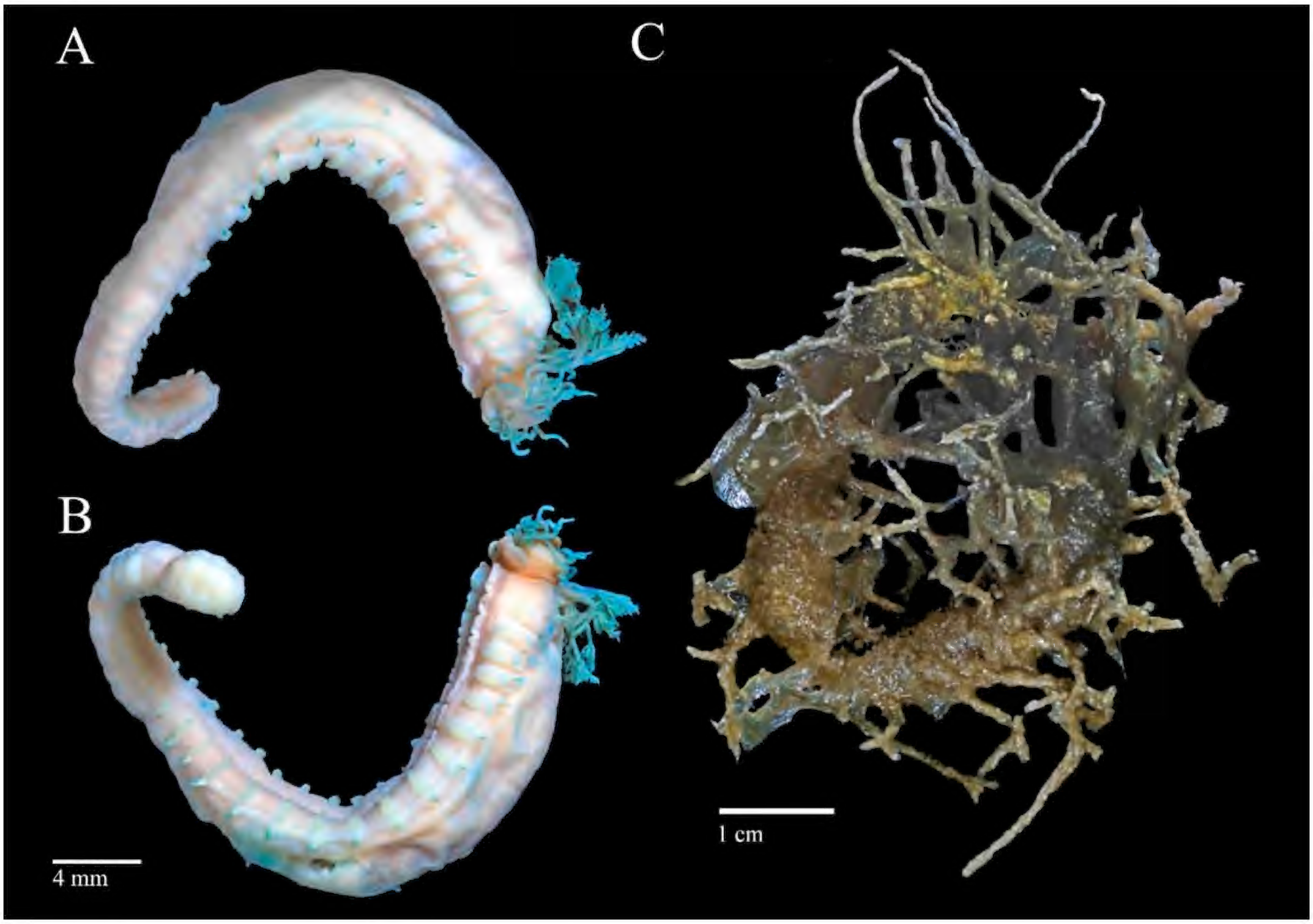

Figure 51. *Eupolymnia* sp. 1. (A-B) AM W.54478 (Op 126) entire animal stained, (A) right lateral, (B) left lateral, (C) tube with external spicules.

Diagnosis Transverse prostomium attached to dorsal surface of upper lip; basal part as thick crest. Numerous cylindrical buccal tentacles. Peristomium restricted to lips. Segment 1 conspicuous, dorsally narrow, with pair of well-developed rectangular ventrolateral lobes connected to each other by narrow midventral lobe. Segment 3 with short lateral lobe. Anterior segments highly glandular ventrally, with discrete rectangular shields, anterior shields rapidly becoming restricted to mid ventral stripe. Three pairs of branchiae, on segments 2–4, each with long stalk and few dichotomous branches. 17 pairs of notopodia from segment 4 with smooth tipped notochaetae. Neuropodia beginning on segment 5, as low ridges in conjunction with notopodia and conical to rectangular pinnules posteriorly; neurochaetae short-handled avicular uncini, in completely intercalated double rows from segment 11 until termination of notopodia.
Taxonomic remarks Worldwide, 34 species of *Eupolymnia* are known, including two from Australian shallow waters, but none have been recorded from the deep sea. This specimen was found in a mass of tubes covered in sponge spicules. Several other specimens were present within this tube aggregation and represents an undescribed species. Specimen gravid female.
Distribution IOT (820–822 m).
Ecology and life history Surface deposit feeder.

***Eupolymnia* sp. 2**

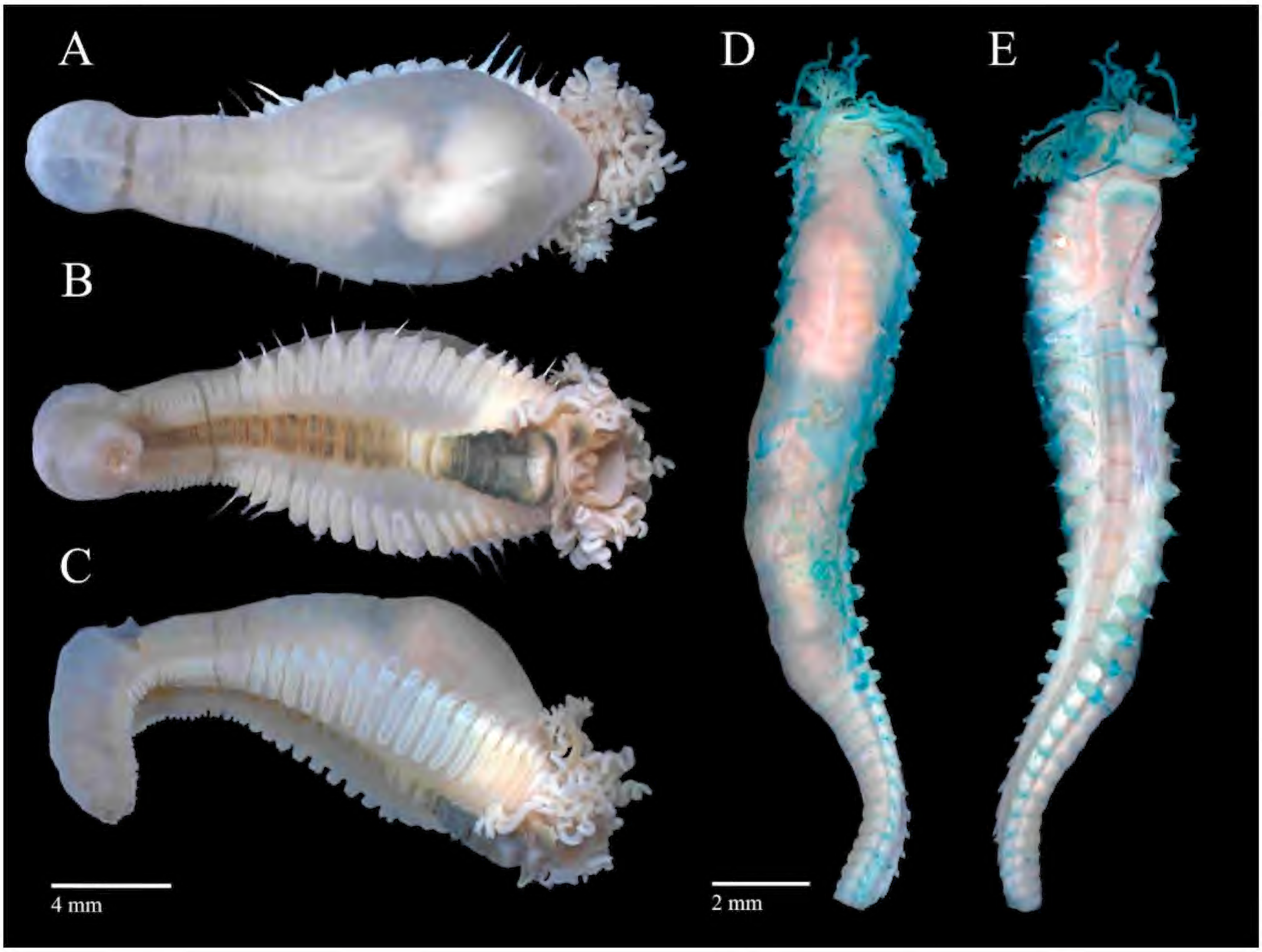

Figure 52. *Eupolymnia* sp. 2. (A-C) AM W.54638 (Op 138) entire animal, (A) dorsal, (B) ventral, (C) right lateral (D-E) AM W.54482 (Op 126), entire animal stained, (D) dorsal, (E) ventral.

Diagnosis Transverse prostomium attached to dorsal surface of upper lip; basal part as thick crest. Numerous cylindrical buccal tentacles. Peristomium restricted to lips. Segment 1 with rectangular ventrolateral lobes, connected mid ventrally by glandular shelf. Segment 3 with small lateral lobe. Anterior segments highly glandular ventrally, with discrete rectangular shields for about first six segments then rapidly reducing to thin mid ventral stripe. Three pairs of unequal sized branchiae, on segments 2–4, each with long stalk and few dichotomous branches. 17 pairs of notopodia from segment 4 with notochaetae. Neuropodia from segment 5, as low, sessile ridges in conjunction with notopodia and conical to rectangular pinnules posteriorly; neurochaetae short-handled avicular uncini, in completely intercalated double rows from segment 11 until termination of notopodia.

Taxonomic remarks Specimens are posteriorly incomplete, inhabiting simple semi-rigid tube with some foraminifera embedded in body wall. Unlike those of *Eupolymnia* n. sp. 1, tubes of this species lack numerous sponge spicules and the specimens differ in shape and position of lateral lobes and structure of branchiae. These two specimens were found in single tubes unlike *Eupolymia* n. sp. 1 found in tube aggregations. Molecular data are needed to confirm that these represent two discrete species.

Distribution IOT, seamounts off Christmas and Cocos (Keeling) Islands (648–822 m).

Ecology and life history Surface deposit feeder.

Nicolea n. sp. 1

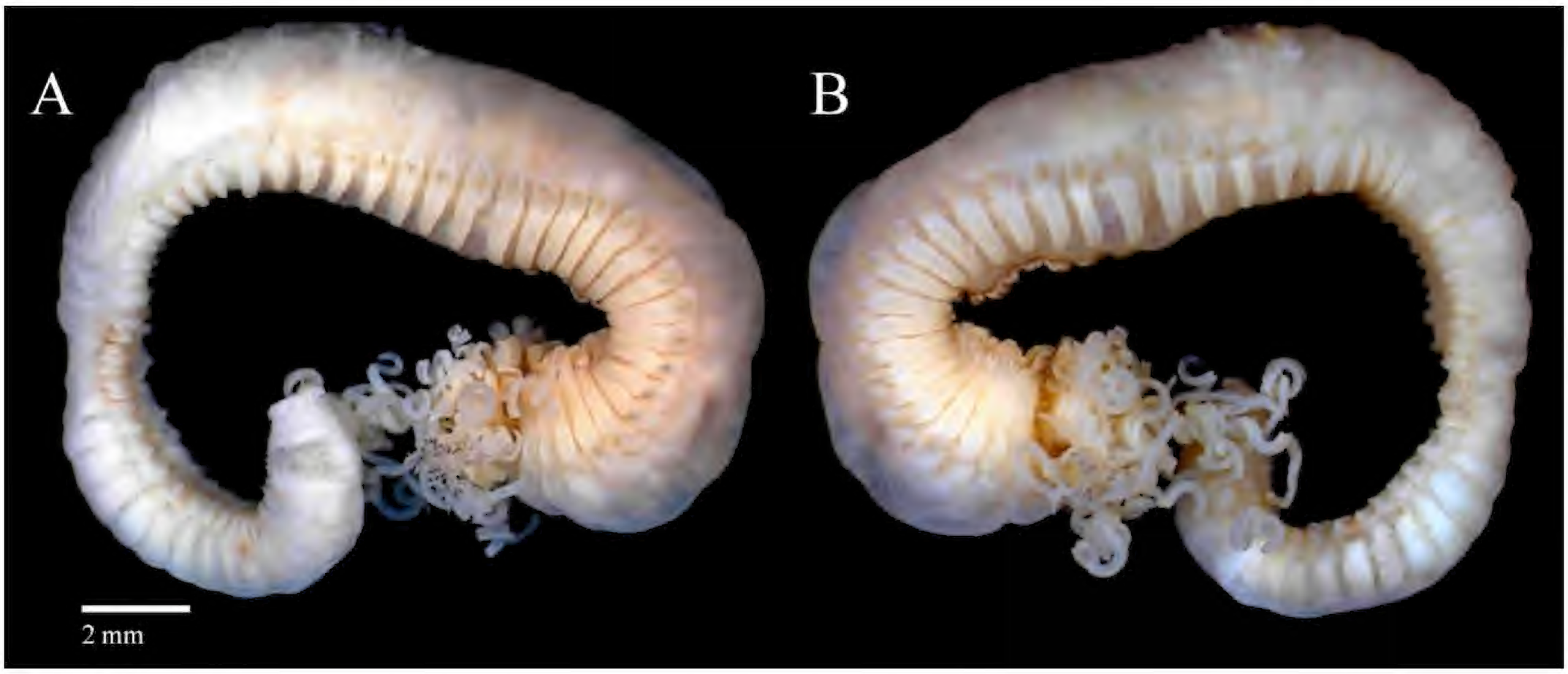

Figure 53. *Nicolea* n. sp. 1. AM W.54840 (Op 193) entire animal, (A) right lateral, (B) left lateral.

Diagnosis Transverse prostomium attached to dorsal surface of upper lip; basal part as thick crest. Numerous cylindrical buccal tentacles uniformly cylindrical. Peristomium restricted to lips; relatively short upper lip, hood-like; swollen, cushion-like and mid-ventral lower lip. Segment 1 reduced dorsally, expanded ventrally, with low mid-ventral lobe marginal to mouth. Lateral lobes absent on all other segments. Two pairs of unequal sized branchiae, on segments 2–3, with few dichotomous branches. Notopodia from segment 4 continuing for 22 segments, notochaetae smooth narrow winged capillaries. Neuropodia beginning on segment 5, as low, sessile ridges in conjunction with notopodia and short pinnules posteriorly; neurochaetae as short-handled avicular uncini, in partial to completely intercalated double rows from around segment 11 until termination of notopodia.
Taxonomic remarks Worldwide, 42 species of *Nicolea* have been described, of which three are known from Australian shallow waters and none are recorded from the deep-sea habitats in this region.
Distribution IOT, seamounts off Christmas and Cocos (Keeling) Islands (467–822 m).
Ecology and life history Surface deposit feeder.

***Nicolea* n. sp. 2**

Figure 54. *Nicolea* n. sp. 2. AM W.54629 (Op 193) entire animal, (A) dorsal, (B) right lateral, (C) ventral, (D) left lateral.

Diagnosis Compact prostomium. Ring of eye spots. Numerous buccal tentacles uniformly cylindrical. Peristomium restricted to lips. Segment 1 reduced dorsally, expanded ventrally, with low mid-ventral lobe marginal to mouth. Segment 3 with small ventral lobe. Two pairs of branchiae, on segments 2–3, only those on segment 2 still attached with long thick ringed stalk with compact short dichotomous branches. Notopodia from segment 4, 21 pairs, with narrow winged capillaries. Neuropodia from segment 5, as low, sessile ridges and slightly raised ridges posteriorly; neurochaetae as short-handled avicular uncini, in partial to completely intercalated double rows from around segment 11 until termination of notopodia. Pygidium with several small papillae. Complete specimen, gravid female.

Taxonomic remarks Worldwide 42 species of *Nicolea* have been described, of which 3 are known from Australian shallow waters and none are recorded from the deep sea in this region.

Distribution IOT, seamounts off Christmas and Cocos (Keeling) Islands (467–477 m).

Ecology and life history Surface deposit feeder.

Terebella sp. 1

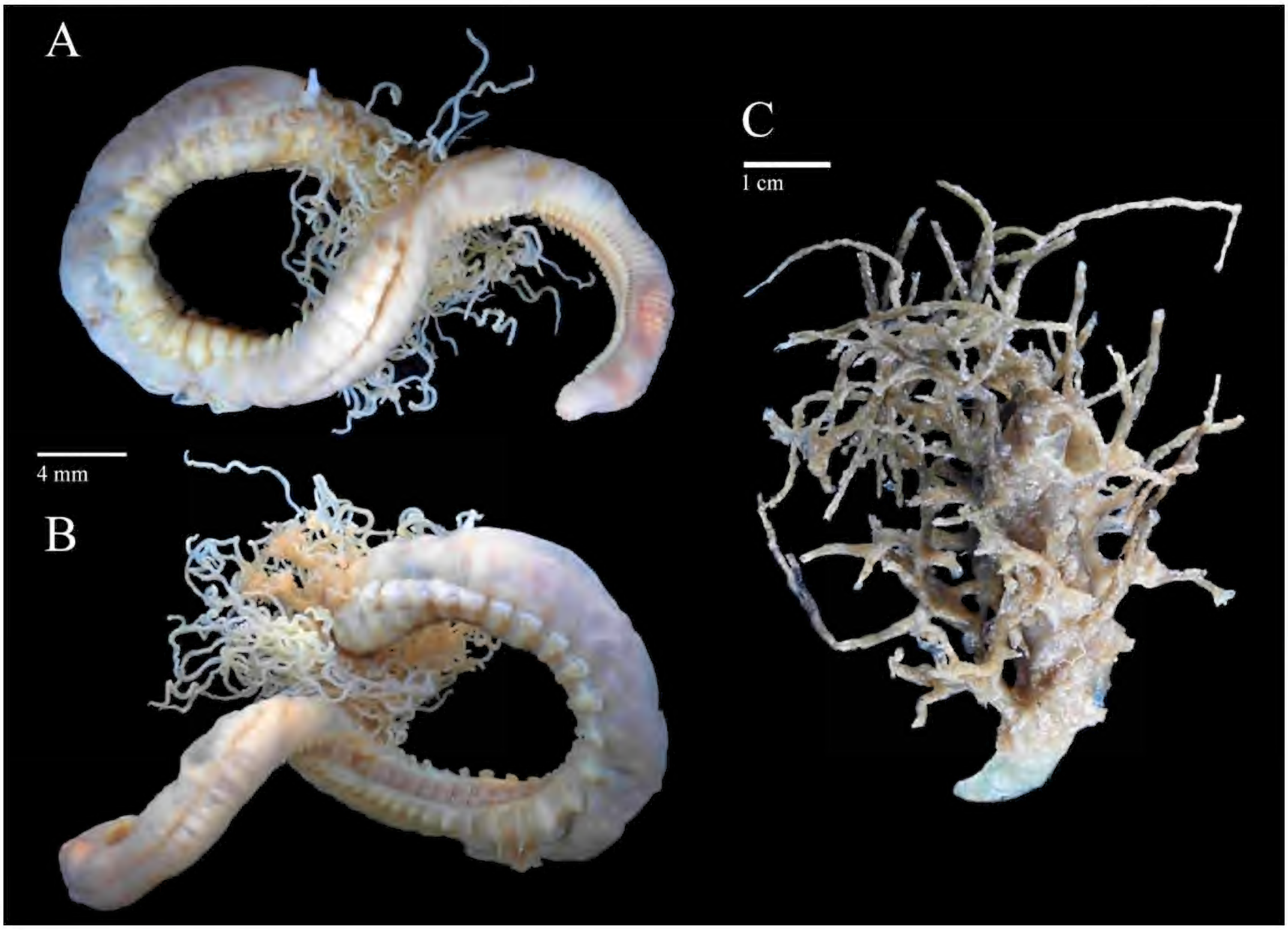

Figure 55. *Terebella* sp. 1. AM W.54479 (Op 126), entire animal, (A) right lateral, (B) left lateral, (C) tube.

Diagnosis Compact prostomium, eye spots present. Three pairs of unequal sized branchiae on segments 2,3 and 4, declining in size from segment 2 to 4, all vertically aligned, short stalk and numerous short dichotomous branches. Lateral lobes absent. 17 pairs of notopodia from segment 4, notochaetae with serrated tips. Neuropodia from segment 5 continue to pygidium, avicular uncini initially arranged in single rows, then in double rows on posterior thorax. Abdominal uncini arranged in single rows on slightly elevated pinnules.

Taxonomic remarks Complete specimen with no colour pattern and not gravid. Large number of species of *Terebella* have been described but none from deep waters around Australia and may represent a new species. Found in amongst a mass of tubes only some of which are occupied.

Distribution IOT, off Cocos (Keeling) Island (820 - 822 m).

Ecology and life history Surface deposit feeder.

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Family index

Ampharetidae, 4
Amphinomidae, 5
Aphroditidae, 6

Eunicidae, 9

Glyceridae, 11

Hesionidae, 12

Iphionidae, 14

Melinnidae, 15

Nephtyidae, 17
Nereididae, 19

Onuphidae, 22
Opheliidae, 27

Polynoidae, 28

Serpulidae, 42

Terebellidae, 54

Species index

Admetella sp., 28
Aglaophamus cf. *hedlandensis*, 17
Aglaophamus cf. *victoriae*, 18
Anchinothria sp., 22
Anotochaetonoe michelbhaudi, 30
Apomatus n. sp. 1, 42
Bathyeliasona sp. 1, 31
Bathyvermilia challengeri, 44
Bathyvermilia n. sp. 1, 43
Ceratonereis cf. *mirabilis*, 19
Ceratonereis n. sp. 1, 20
Eunice sp. 1, 9
Eunice sp. 2, 10
Eunoe sp. 1, 34
Eupolymnia sp. 1, 54
Eupolymnia sp. 2, 55
Eurythoe sp. 1, 5
Filogranula stellata, 45
Glycera cf. *lapidum*, 11
Gorgoniapolynoe [?], 32
Harmothoe sp. 1, 35
Harmothoe sp. 2, 36
Harmothoe sp. 3, 37
Harmothoe sp. 4, 38
Harmothoe sp. 5, 39
Harmothoe sp. 6, 40
Hyalinoecia sp., 23
Hyalopomatus n. sp. 1, 48
Hyalopomatus n. sp. 2, 49
Hyalopomatus n. sp. 3, 50
Iphione treadwelli, 14
Laetmonice n. sp. 1, 6
Laetmonice n. sp. 2, 7
Laetmonice n. sp. 3, 8
Melinna n. sp. 1, 15
Melinnopsis sp. 1, 16
Neomicrorbis azoricus, 51
Nereis sp. 1, 21
Nicolea n. sp. 1, 56
Nicolea n. sp. 2, 57
Nothria simplex, 24
Nothria sp. 1, 25
Nothria sp. 2, 26
Ophelina sp. 1, 27
Ophelina sp. 2, 28
Paralamprophaea cf. *crosnieri*, 12
Paralamprophaea n. sp., 13
Placostegus sp. 1, 52
Protis n. sp. 1, 46
Protis n. sp. 2, 47
Terebella sp. 1, 58
Vitreotubus digeronimoi, 53

Ampharetidae gen. and sp. nov., 4

Polynoinae gen. sp. 1, 41

Appendix - Annelida from voyages IN2021_V04 and IN2022_V08 to the Australian Christmas Island and Cocos (Keeling) Islands Territories

Family	Species name	Voyage	Operation	Acc. no[1]	Gear	Num	Reg. no.[2]
Alciopini		IN2021_v08	111	G	Gandalf net	1	NMV F271120
Alciopini		IN2021_v08	113	G	Gandalf net	1	NMV F271131
Alciopini		IN2021_v08	117	G	Gandalf net	2	NMV F315213
Alciopini		IN2021_v08	124	G	Gandalf net	2	NMV F271132
Ampharetidae		IN2021_v04	28	138	beam trawl	1	AM W.53437
Ampharetidae		IN2021_v04	37	145	beam trawl	3	AM W.53471
Ampharetidae		IN2021_v04	50	123	beam trawl	9	AM W.53496
Ampharetidae		IN2022_v08	103	130	beam trawl	1	AM W.54633
Ampharetidae		IN2022_v08	113	206	beam trawl	1	AM W.54432
Ampharetidae		IN2022_v08	113	167	beam trawl	2	AM W.54435
Ampharetidae		IN2022_v08	117	128	beam trawl	4	AM W.54588
Ampharetidae		IN2022_v08	131	203	beam trawl	1	AM W.54590
Ampharetidae		IN2022_v08	147	151	beam trawl	1	AM W.54431
Ampharetidae		IN2022_v08	147	124	beam trawl	1	AM W.54664
Ampharetidae		IN2022_v08	151	150	beam trawl	1	AM W.54436
Ampharetidae		IN2022_v08	172	140	Sherman sled	1	AM W.54641
Ampharetidae		IN2022_v08	181	155	beam trawl	1	AM W.54591
Amphinomidae	*Eurythoe* sp.	IN2021_v04	28	138	beam trawl	1	AM W.53437
Amphinomidae	*Eurythoe* sp.	IN2021_v04	48	140	beam trawl	1	AM W.53491
Amphinomidae	*Eurythoe* sp.	IN2022_v08	161	130	beam trawl	1	AM W.54615
Amphinomidae	*Eurythoe* sp.	IN2022_v08	161	131	beam trawl	1	AM W.54616
Amphinomidae	*Eurythoe* sp.	IN2022_v08	161	135	beam trawl	1	AM W.54617
Amphinomidae	*Eurythoe* sp.	IN2022_v08	163	139	beam trawl	1	AM W.54491
Amphinomidae		IN2021_v08	151	G	Gandalf net	1	NMV F310792
Amphinomidae		IN2021_v08	161	G	Gandalf net	1	NMV F315415
Aphroditidae	*Laetmonice* n. sp. 1	IN2021_v04	7	114	Beam Trawl	1	AM W.53401
Aphroditidae	*Laetmonice* n. sp. 1	IN2021_v04	28	126	Beam Trawl	1	AM W.53433
Aphroditidae	*Laetmonice* n. sp. 1	IN2021_v04	28	127	Beam Trawl	1	AM W.53434
Aphroditidae	*Laetmonice* n. sp. 1	IN2021_v04	28	128	Beam Trawl	1	AM W.53435
Aphroditidae	*Laetmonice* n. sp. 1	IN2021_v04	28	129	Beam Trawl	1	AM W.53436
Aphroditidae	*Laetmonice* n. sp. 1	IN2021_v04	28	148	Beam Trawl	1	AM W.53446
Aphroditidae	*Laetmonice* n. sp. 1	IN2021_v04	28	150	Beam Trawl	1	AM W.53448
Aphroditidae	*Laetmonice* n. sp. 1	IN2021_v04	28	152	Beam Trawl	1	AM W.53450
Aphroditidae	*Laetmonice* n. sp. 1	IN2021_v04	28	154	Beam Trawl	1	AM W.53452
Aphroditidae	*Laetmonice* n. sp. 1	IN2021_v04	50	116	Beam Trawl	1	AM W.53495
Aphroditidae	*Laetmonice* n. sp. 1	IN2022_v08	116	138	Beam Trawl	1	AM W.54333
Aphroditidae	*Laetmonice* n. sp. 1	IN2022_v08	117	115	Beam Trawl	1	AM W.54322
Aphroditidae	*Laetmonice* n. sp. 1	IN2022_v08	117	113	Beam Trawl	1	AM W.54324
Aphroditidae	*Laetmonice* n. sp. 1	IN2022_v08	117	114	Beam Trawl	1	AM W.54327
Aphroditidae	*Laetmonice* n. sp. 1	IN2022_v08	117	116	Beam Trawl	1	AM W.54332
Aphroditidae	*Laetmonice* n. sp. 1	IN2022_v08	117	117	Beam Trawl	12	AM W.54334
Aphroditidae	*Laetmonice* n. sp. 1	IN2022_v08	131	152	Beam Trawl	1	AM W.54323
Aphroditidae	*Laetmonice* n. sp. 1	IN2022_v08	131	155	Beam Trawl	1	AM W.54328
Aphroditidae	*Laetmonice* n. sp. 1	IN2022_v08	131	151	Beam Trawl	1	AM W.54329
Aphroditidae	*Laetmonice* n. sp. 1	IN2022_v08	131	154	Beam Trawl	1	AM W.54330
Aphroditidae	*Laetmonice* n. sp. 1	IN2022_v08	131	153	Beam Trawl	1	AM W.54423
Aphroditidae	*Laetmonice* n. sp. 1	IN2022_v08	131	128	Beam Trawl	1	AM W.54505
Aphroditidae	*Laetmonice* n. sp. 2	IN2021_v04	7	107	Beam Trawl	1	AM W.53400
Aphroditidae	*Laetmonice* n. sp. 2	IN2021_v04	18	105	Sherman Sled	1	AM W.53419
Aphroditidae	*Laetmonice* n. sp. 2	IN2021_v04	18	105	Sherman Sled	1	AM W.54522
Aphroditidae	*Laetmonice* n. sp. 2	IN2021_v04	18	105	Sherman Sled	1	AM W.54523
Aphroditidae	*Laetmonice* n. sp. 2	IN2021_v04	28	141	Beam Trawl	1	AM W.53439

Family	Species name	Voyage	Operation	Acc. no[1]	Gear	Num	Reg. no.[2]
Aphroditidae	*Laetmonice* n. sp. 2	IN2021_v04	28	142	Beam Trawl	1	AM W.53440
Aphroditidae	*Laetmonice* n. sp. 2	IN2021_v04	28	143	Beam Trawl	1	AM W.53441
Aphroditidae	*Laetmonice* n. sp. 2	IN2021_v04	28	144	Beam Trawl	1	AM W.53442
Aphroditidae	*Laetmonice* n. sp. 2	IN2021_v04	28	145	Beam Trawl	1	AM W.53443
Aphroditidae	*Laetmonice* n. sp. 2	IN2021_v04	28	146	Beam Trawl	1	AM W.53444
Aphroditidae	*Laetmonice* n. sp. 2	IN2021_v04	28	147	Beam Trawl	1	AM W.53445
Aphroditidae	*Laetmonice* n. sp. 2	IN2021_v04	28	149	Beam Trawl	1	AM W.53447
Aphroditidae	*Laetmonice* n. sp. 2	IN2021_v04	28	153	Beam Trawl	1	AM W.53451
Aphroditidae	*Laetmonice* n. sp. 2	IN2021_v04	28	155	Beam Trawl	1	AM W.53453
Aphroditidae	*Laetmonice* n. sp. 2	IN2021_v04	28	156	Beam Trawl	1	AM W.53454
Aphroditidae	*Laetmonice* n. sp. 2	IN2021_v04	28	157	Beam Trawl	1	AM W.53455
Aphroditidae	*Laetmonice* n. sp. 2	IN2021_v04	33	‘105	Beam Trawl	1	AM W.54524
Aphroditidae	*Laetmonice* n. sp. 2	IN2021_v04	33	105	Beam Trawl	1	AM W.54525
Aphroditidae	*Laetmonice* n. sp. 2	IN2021_v04	33	105	Beam Trawl	1	AM W.53463
Aphroditidae	*Laetmonice* n. sp. 2	IN2022_v08	115	151	Beam Trawl	3	AM W.54335
Aphroditidae	*Laetmonice* n. sp. 2	IN2022_v08	115	150	Beam Trawl	1	AM W.54337
Aphroditidae	*Laetmonice* sp. 2	IN2021_v04	7	116	Beam Trawl	1	AM W.53402
Aphroditidae	*Laetmonice*	IN2021_v04	28	151	Beam Trawl	1	AM W.53449
Aphroditidae	*Laetmonice*	IN2022_v08	105	125	Beam Trawl	1	AM W.54331
Aphroditidae	*Laetmonice*	IN2022_v08	116	139	Beam Trawl	1	AM W.54321
Aphroditidae	*Laetmonice*	IN2022_v08	117	153	Beam Trawl	1	AM W.54325
Aphroditidae	*Laetmonice*	IN2022_v08	122	223	Beam Trawl	1	AM W.54424
Aphroditidae	*Laetmonice*	IN2022_v08	122	147	Beam Trawl	1	AM W.54488
Aphroditidae	*Laetmonice*	IN2022_v08	147	150	Beam Trawl	1	AM W.54326
Aphroditidae	*Laetmonice*	IN2022_v08	193	129	Beam Trawl	1	AM W.54336
Aphroditidae	*Laetmonice*	IN2022_v08	193	128	Beam Trawl	1	AM W.54490
Chaetopteridae		IN2022_v08	149	132	Beam Trawl	1	AM W.54643
Chaetopteridae		IN2022_v08	179	181	Sherman Sled	1	AM W.54623
Eunicidae	*Eunice* sp. 1	IN2022_v08	179	150	Beam Trawl	1	AM W.54503
Eunicidae	*Eunice* sp. 2	IN2022_v08	141	118	Beam Trawl	1	AM W.54834
Eunicidae		IN2022_v08	105	127	Beam Trawl	1	AM W.54653
Eunicidae		IN2022_v08	113	203	Beam Trawl	1	AM W.54428
Eunicidae		IN2022_v08	117	166	Beam Trawl	1	AM W.54460
Eunicidae		IN2022_v08	117	128	Beam Trawl	1	AM W.54647
Eunicidae		IN2022_v08	124	154	Beam Trawl	2	AM W.54646
Eunicidae		IN2022_v08	141	121	Beam Trawl	3	AM W.54654
Eunicidae		IN2022_v08	141	120	Beam Trawl	2	AM W.54656
Eunicidae		IN2022_v08	141	119	Beam Trawl	2	AM W.54658
Eunicidae		IN2022_v08	145	161	Beam Trawl	1	AM W.54650
Eunicidae		IN2022_v08	165	125	Beam Trawl	1	AM W.54906
Eunicidae		IN2022_v08	165	161	Beam Trawl	1	AM W.54652
Eunicidae		IN2022_v08	165	126	Beam Trawl	1	AM W.54659
Eunicidae		IN2022_v08	170	135	Sherman Sled	1	AM W.54504
Eunicidae		IN2022_v08	170	113	Sherman Sled	1	AM W.54657
Eunicidae		IN2022_v08	172	143	Sherman Sled	2	AM W.54648
Eunicidae		IN2022_v08	172	144	Sherman Sled	1	AM W.54651
Fauveliopsidae		IN2021_v08	131	G	Gandalf net	1	NMV F315409
Flabelligeridae		IN2021_v08	116	G	Gandalf net	1	NMV F271102
Flabelligeridae		IN2021_v08	117	G	Gandalf net	1	NMV F271100
Flabelligeridae		IN2021_v08	120	G	Gandalf net	1	NMV F271125
Flabelligeridae		IN2021_v08	128	G	Gandalf net	1	NMV F310786
Flabelligeridae		IN2021_v08	128	G	Gandalf net	6	NMV F315418
Flabelligeridae		IN2021_v08	131	G	Gandalf net	8	NMV F315404
Flabelligeridae		IN2021_v08	151	G	Gandalf net	1	NMV F271101
Flabelligeridae		IN2021_v08	181	G	Gandalf net	5	NMV F315230
Flabelligeridae		IN2021_v08	196	G	Gandalf net	1	NMV F310867
Glyceridae		IN2022_v08	163	181	Beam Trawl	1	AM W.54837
Glyceridae		IN2022_v08	179	192	Sherman Sled	1	AM W.54645

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Glyceridae	*Glycera* cf. *lapidum*	IN2021_v08	151	G	Gandalf net	1	NMV F315425
Glyceridae	*Glycera* cf. *lapidum*	IN2021_v08	159	G	Gandalf net	1	NMV F310928
Goniadidae		IN2021_v04	13	117	beam trawl	1	AM W.53522
Goniadidae		IN2022_v08	179	190	Sherman sled	1	AM W.54426
Goniadidae		IN2022_v08	179	174	Sherman sled	1	AM W.54509
Goniadidae		IN2021_v08	116	G	Gandalf net	1	NMV F315427
Hesionidae	*Paralamprophaea* cf. crosnieri	IN2022_v08	170	114	Sherman Sled	1	AM W.54839
Hesionidae	*Paralamprophaea* cf. crosnieri	IN2022_v08	172	141	Sherman Sled	1	AM W.54609
Hesionidae	*Paralamprophaea* cf. crosnieri	IN2022_v08	179	159	Sherman Sled	2	AM W.54430
Hesionidae	*Paralamprophaea* cf. crosnieri	IN2022_v08	179	160	Sherman Sled	3	AM W.54514
Hesionidae	*Paralamprophaea* cf. crosnieri	IN2022_v08	179	192	Sherman Sled	2	AM W.54610
Hesionidae	*Paralamprophaea* sp.	IN2022_v08	170	114	Sherman Sled	6	AM W.54611
Hesionidae	*Paralamprophaea* sp.	IN2022_v08	170	114	Sherman Sled	2	AM W.54838
Hesionidae		IN2022_v08	128	127	Beam Trawl	1	AM W.54355
Hesionidae		IN2022_v08	136	G	Gandalf net	1	NMV F271106
Hesionidae		IN2022_v08	151	G	Gandalf net	1	NMV F315224
Hesionidae		IN2022_v08	176	128	Sherman Sled	1	AM W.54661
Iphionidae	*Iphione treadwelli*	IN2022_v08	179	141	Sherman sled	1	AM W.54429
Lopadorrhynchidae	cf. *Pelagobia*	IN2022_v08	103	G	Gandalf net	2	NMV F271105
Lopadorrhynchidae	cf. *Pelagobia*	IN2022_v08	161	G	Gandalf net	1	NMV F310829
Lopadorrhynchidae	cf. *Pelagobia*	IN2022_v08	163	G	Gandalf net	1	NMV F310774
Lumbrineridae		IN2022_v08	120	G	Gandalf net	1	NMV F310821
Maldanidae		IN2021_v04	12	118	Beam Trawl	1	AM W.53415
Maldanidae		IN2021_v04	24	119	Beam Trawl	1	AM W.53427
Maldanidae		IN2021_v04	24	120	Beam Trawl	1	AM W.53428
Maldanidae		IN2021_v04	48	139	Beam Trawl	1	AM W.53490
Maldanidae		IN2022_v08	103	130	Beam Trawl		AM W.54600
Maldanidae		IN2022_v08	117	128	Beam Trawl	1	AM W.54602
Maldanidae		IN2022_v08	145	146	Beam Trawl	1	AM W.54603
Maldanidae		IN2022_v08	147	123	Beam Trawl	1	AM W.54599
Maldanidae		IN2022_v08	147	124	Beam Trawl	2	AM W.54601
Maldanidae		IN2022_v08	165	125	Beam Trawl	1	AM W.54660
Maldanidae		IN2022_v08	181	154	Beam Trawl	1	AM W.54597
Maldanidae		IN2022_v08	183	147	Beam Trawl	1	AM W.54605
Maldanidae		IN2022_v08	187	127	Beam Trawl	3	AM W.54606
Melinnidae	*Melinna* sp.	IN2022_v08	115	115	Beam Trawl	1	AM W.54625
Melinnidae	*Melinnopsis* sp. 1	IN2021_v04	31	142	Beam Trawl	2	AM W.53457
Nephtyidae	*Aglaophamus* cf. *hedlandensis*	IN2022_v08	161	G	Gandalf net	1	NMV F315411
Nephtyidae	*Aglaophamus* cf. *victoriae*	IN2022_v08	181	G	Gandalf net	1	NMV F271116
Nephtyidae	*Aglaophamus* cf. *victoriae*	IN2022_v08	185	G	Gandalf net	1	NMV F315424
Nephtyidae	*Aglaophamus* cf. *victoriae*	IN2022_v08	189	G	Gandalf net	1	NMV F315233
Nephtyidae	*Aglaophamus* cf. *victoriae*	IN2022_v08	191	G	Gandalf net	2	NMV F315234
Nereididae	*Ceratonereis* cf. mirabilis	IN2022_v08	172	142	Sherman Sled	2	AM W.54621
Nereididae	*Ceratonereis* sp.	IN2022_v08	179	192	Sherman Sled	1	AM W.54622
Nereididae	*Neanthes* sp.	IN2021_v04	48	116	Beam Trawl	1	AM W.53486
Nereididae	*Nereis* sp.	IN2022_v08	183	153	Beam Trawl	1	AM W.54425
Nereididae		IN2022_v08	128	G	Gandalf net	1	NMV F310781
Nereididae		IN2022_v08	151	G	Gandalf net	1	NMV F310796
Nereididae		IN2022_v08	153	G	Gandalf net	1	NMV F310800
Onuphidae	*Anchinothria* sp.	IN2022_v08	157	140	Beam Trawl	3	AM W.54596
Onuphidae	*Hyalinoecia* sp.	IN2021_v04	13	016	Beam Trawl	1	AM W.53503
Onuphidae	*Hyalinoecia*	IN2022_v08	108	G	Gandalf net	1	NMV F315209
Onuphidae	*Hyalinoecia*	IN2022_v08	131	G	Gandalf net	13	NMV F315405
Onuphidae	*Hyalinoecia*	IN2022_v08	141	G	Gandalf net	1	NMV F310918
Onuphidae	*Hyalinoecia*	IN2022_v08	143	G	Gandalf net	1	NMV F310788
Onuphidae	*Hyalinoecia*	IN2022_v08	157	G	Gandalf net	19	NMV F315226
Onuphidae	*Hyalinoecia*	IN2022_v08	163	G	Gandalf net	1	NMV F271127
Onuphidae	*Hyalinoecia*	IN2022_v08	165	G	Gandalf net	3	NMV F315410

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Onuphidae	*Hyalinoecia*	IN2022_v08	181	G	Gandalf net	1	NMV F271111
Onuphidae	*Hyalinoecia*	IN2022_v08	191	G	Gandalf net	4	NMV F271110
Onuphidae	*Hyalinoecia*	IN2022_v08	191	G	Gandalf net	3	NMV F310894
Onuphidae	*Nothria* simplex	IN2022_v08	147	149	Beam Trawl	2	AM W.54619
Onuphidae	*Nothria* sp.	IN2022_v08	145	141	Beam Trawl	3	AM W.54835
Onuphidae	*Nothria* sp.	IN2022_v08	147	124	Beam Trawl		AM W.54664
Onuphidae	*Nothria* sp.	IN2022_v08	147	124	Beam Trawl	1	AM W.54649
Onuphidae	*Nothria* sp.	IN2022_v08	179	192	Sherman Sled	1	AM W.54655
Onuphidae	*Nothria* sp. 1	IN2022_v08	145	140	Beam Trawl	5	AM W.54620
Onuphidae	*Nothria* sp. 2	IN2022_v08	181	155	Beam Trawl	6	AM W.54618
Onuphidae		IN2021_v04	9	138	Beam Trawl	1	AM W.53411
Onuphidae		IN2022_v08	105	124	Beam Trawl	1	AM W.54589
Onuphidae		IN2022_v08	116	162	Beam Trawl	1	AM W.54630
Onuphidae		IN2022_v08	124	153	Beam Trawl	1	AM W.54636
Opheliidae	*Ophelina* sp. 1	IN2022_v08	151	G	Gandalf net	1	NMV F271104
Opheliidae	*Ophelina* sp. 2	IN2022_v08	126	G	Gandalf net	1	NMV F271128
Opheliidae	*Ophelina* sp. 2	IN2022_v08	161	G	Gandalf net	1	NMV F315412
Oweniidae		IN2021_v04	24	024	Beam Trawl	5	AM W.53424
Oweniidae		IN2022_v08	103	130	Beam Trawl	10	AM W.55303
Oweniidae		IN2022_v08	103	131	Beam Trawl	20	AM W.54831
Oweniidae		IN2022_v08	120	183	Beam Trawl	1	AM W.54627
Oweniidae		IN2022_v08	181	155	Beam Trawl	1	AM W.54634
Paraonidae		IN2022_v08	181	G	Gandalf net	1	NMV F271112
Pectinariidae		IN2021_v04	50	112	beam trawl	1	AM W.53494
Phyllodocidae	*Eumida*	IN2022_v08	157	G	Gandalf net	1	NMV F271133
Phyllodocidae		IN2022_v08	159	G	Gandalf net	1	NMV F271108
Polynoidae	*?Gorgoniapolynoe* sp.	IN2021_v04	9	135	Beam Trawl	15	AM W.53408
Polynoidae	*?Gorgoniapolynoe* sp.	IN2021_v04	9	136	Beam Trawl	1	AM W.53409
Polynoidae	*?Gorgoniapolynoe* sp.	IN2021_v04	9	137	Beam Trawl	1	AM W.53410
Polynoidae	*?Gorgoniapolynoe* sp.	IN2021_v04	9	139	Beam Trawl	1	AM W.53412
Polynoidae	*?Gorgoniapolynoe* sp.	IN2021_v04	9	140	Beam Trawl	4	AM W.53413
Polynoidae	*?Gorgoniapolynoe* sp.	IN2021_v04	9	134	Beam Trawl	9	AM W.53502
Polynoidae	*?Macellicephalinae*	IN2022_v08	116	G	Gandalf net	1	NMV F310859
Polynoidae	*Admetella* sp.	IN2022_v08	157	129	Beam Trawl	1	AM W.54480
Polynoidae	*Admetella* sp.	IN2022_v08	157	131	Beam Trawl	1	AM W.54493
Polynoidae	*Admetella* sp.	IN2022_v08	157	130	Beam Trawl	1	AM W.54498
Polynoidae	*Admetella* sp.	IN2022_v08	191	120	Beam Trawl	1	AM W.54494
Polynoidae	*Anotochaetonoe* michelbhaudi	IN2021_v04	5	156	Beam Trawl	1	AM W.53397
Polynoidae	*Anotochaetonoe* michelbhaudi	IN2021_v04	18	118	Beam Trawl	1	AM W.53420
Polynoidae	*Anotochaetonoe* michelbhaudi	IN2022_v08	161	129	Beam Trawl	1	AM W.54607
Polynoidae	*Bathyeliasoma* sp.	IN2022_v08	106	108	Beam Trawl	1	AM W.54492
Polynoidae	*Bathyeliasoma* sp.	IN2022_v08	120	106	Beam Trawl	1	AM W.54360
Polynoidae	*Bathyeliasoma* sp.	IN2022_v08	122	172	Beam Trawl	1	AM W.54365
Polynoidae	*Eunoe* sp.	IN2021_v04	35	128	Beam Trawl	1	AM W.53466
Polynoidae	*Eunoe* sp.	IN2021_v04	46	121	Beam Trawl	1	AM W.53477
Polynoidae	*Harmothoe* sp. 1	IN2022_v08	161	143	Beam Trawl	1	AM W.54351
Polynoidae	*Harmothoe* sp. 1	IN2022_v08	179	189	Beam Trawl	1	AM W.54350
Polynoidae	*Harmothoe* sp. 1	IN2022_v08	179	194	Beam Trawl	1	AM W.54352
Polynoidae	*Harmothoe* sp. 1	IN2022_v08	179	193	Beam Trawl	1	AM W.54357
Polynoidae	*Harmothoe* sp. 1	IN2022_v08	179	192	Beam Trawl	1	AM W.54608
Polynoidae	*Harmothoe* sp. 2	IN2022_v08	138	149	Beam Trawl	1	AM W.54502
Polynoidae	*Harmothoe* sp. 3	IN2022_v08	113	204	Beam Trawl	1	AM W.54353
Polynoidae	*Harmothoe* sp. 3	IN2022_v08	113	181	Beam Trawl	1	AM W.54354
Polynoidae	*Harmothoe* sp. 3	IN2022_v08	113	209	Beam Trawl	1	AM W.54363
Polynoidae	*Harmothoe* sp. 3	IN2022_v08	115	180	Beam Trawl	1	AM W.54361
Polynoidae	*Harmothoe* sp. 3	IN2022_v08	122	185	Beam Trawl	1	AM W.54359
Polynoidae	*Harmothoe* sp. 4	IN2022_v08	138	150	Beam Trawl	4	AM W.54358
Polynoidae	*Harmothoe* sp. 4	IN2022_v08	176	105	Beam Trawl	1	AM W.54362

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Polynoidae	*Harmothoe* sp. 4	IN2022_v08	179	195	Beam Trawl	1	AM W.54364
Polynoidae	*Harmothoe* sp. 5	IN2022_v08	163	161	Beam Trawl	1	AM W.54836
Polynoidae	*Harmothoe* sp. 6	IN2022_v08	170	120	Beam Trawl	1	AM W.54349
Polynoidae	*Polynoinae*	IN2022_v08	108	G	Gandalf net	1	NMV F310745
Polynoidae		IN2021_v04	9	135	Beam Trawl	1	AM W.55304
Polynoidae		IN2021_v04	48	128	Beam Trawl	1	AM W.53488
Polynoidae		IN2022_v08	120	109	Beam Trawl	1	AM W.54477
Polynoidae		IN2022_v08	128	G	Gandalf net	1	NMV F315417
Polynoidae		IN2022_v08	131	G	Gandalf net	1	NMV F315407
Polynoidae		IN2022_v08	136	G	Gandalf net	1	NMV F271124
Polynoidae		IN2022_v08	155	154	Beam Trawl	1	AM W.54501
Polynoidae		IN2022_v08	157	G	Gandalf net	2	NMV F315403
Polynoidae		IN2022_v08	181	G	Gandalf net	1	NMV F271115
Sabellidae	*Pseudobranchiomma*	IN2022_v08	179	142	beam trawl	1	AM W.54427
Serpulidae	*Apomatus* n. sp. 1	IN2021_v04	22	120	Beam Trawl	1	AM W.53423
Serpulidae	*Apomatus* n. sp. 1	IN2022_v08	155	147	Beam Trawl	1	AM W.54510
Serpulidae	*Apomatus* n. sp. 1	IN2022_v08	165	124	Beam Trawl	2	AM W.54373
Serpulidae	*Bathyditrupa*	IN2022_v08	122	157	Beam Trawl	1	AM W.54388
Serpulidae	*Bathyvermilia* challengeri	IN2021_v04	2	119	Beam Trawl	1	AM W.53395
Serpulidae	*Bathyvermilia* gregrousei	IN2022_v08	103	G	Gandalf net	1	AM W.54442
Serpulidae	*Bathyvermilia* gregrousei	IN2022_v08	103	G	Gandalf net	1	AM W.54443
Serpulidae	*Bathyvermilia* gregrousei	IN2022_v08	103	G	Gandalf net	1	AM W.54444
Serpulidae	*Bathyvermilia* gregrousei	IN2022_v08	103	G	Gandalf net	1	AM W.54445
Serpulidae	*Bathyvermilia* gregrousei	IN2022_v08	103	G	Gandalf net	4	AM W.54446
Serpulidae	*Bathyvermilia* gregrousei	IN2022_v08	103	G	Gandalf net	1	AM W.54447
Serpulidae	*Bathyvermilia* gregrousei	IN2022_v08	103	G	Gandalf net	1	AM W.54448
Serpulidae	*Bathyvermilia* gregrousei	IN2022_v08	103	G	Gandalf net	1	AM W.54449
Serpulidae	*Bathyvermilia* n. sp. 1	IN2021_v04	5	159	Beam Trawl	2	AM W.53398
Serpulidae	*Bathyvermilia* n. sp. 1	IN2021_v04	5	160	Beam Trawl	1	AM W.53399
Serpulidae	*Filogranula* stellata	IN2021_v04	7	121	Beam Trawl	1	AM W.53403
Serpulidae	*Filogranula* stellata	IN2021_v04	7	138	Beam Trawl	5	AM W.53407
Serpulidae	*Filogranula* stellata	IN2021_v04	13	129	Beam Trawl	1	AM W.53416
Serpulidae	*Filogranula* stellata	IN2021_v04	13	132	Beam Trawl	1	AM W.53418
Serpulidae	*Filogranula* stellata	IN2021_v04	31	158	Beam Trawl	1	AM W.53461
Serpulidae	*Filogranula* stellata	IN2021_v04	31	159	Beam Trawl	1	AM W.53462
Serpulidae	*Filogranula* stellata	IN2022_v08	143	149	Beam Trawl	1	AM W.54390
Serpulidae	*Hyalopomatus* n. sp. 1	IN2021_v04	2	117	Beam Trawl	1	AM W.53393
Serpulidae	*Hyalopomatus* n. sp. 1	IN2021_v04	2	120	Beam Trawl	1	AM W.53396
Serpulidae	*Hyalopomatus* n. sp. 1	IN2022_v02	131	170	Beam Trawl	1	AM W.55295
Serpulidae	*Hyalopomatus* n. sp. 1	IN2022_v08	111	117	Beam Trawl	1	AM W.54508
Serpulidae	*Hyalopomatus* n. sp. 1	IN2022_v08	120	150	Beam Trawl	1	AM W.54368
Serpulidae	*Hyalopomatus* n. sp. 1	IN2022_v08	120	144	Beam Trawl	1	AM W.54396
Serpulidae	*Hyalopomatus* n. sp. 1	IN2022_v08	120	187	Beam Trawl	12	AM W.54420
Serpulidae	*Hyalopomatus* n. sp. 1	IN2022_v08	120	137	Beam Trawl	1	AM W.55293
Serpulidae	*Hyalopomatus* n. sp. 1	IN2022_v08	120	153	Beam Trawl	1	AM W.55296
Serpulidae	*Hyalopomatus* n. sp. 1	IN2022_v08	155	157	Beam Trawl	1	AM W.55300
Serpulidae	*Hyalopomatus* n. sp. 1	IN2022_v08	163	156	Beam Trawl	1	AM W.55297
Serpulidae	*Hyalopomatus* n. sp. 1	IN2022_v08	183	151	Beam Trawl	1	AM W.54383
Serpulidae	*Hyalopomatus* n. sp. 2	IN2021_v04	28	124	Beam Trawl	20	AM W.53432
Serpulidae	*Hyalopomatus* n. sp. 2	IN2021_v04	28	123	Beam Trawl	20	AM W.53504
Serpulidae	*Hyalopomatus* n. sp. 2	IN2021_v04	31	149	Beam Trawl	6	AM W.53459
Serpulidae	*Hyalopomatus* n. sp. 2	IN2022_v08	103	161	Beam Trawl	4	AM W.54395
Serpulidae	*Hyalopomatus* n. sp. 2	IN2022_v08	115	129	Beam Trawl	1	AM W.54386
Serpulidae	*Hyalopomatus* n. sp. 2	IN2022_v08	120	138	Beam Trawl	1	AM W.55292
Serpulidae	*Hyalopomatus* n. sp. 2	IN2022_v08	122	220	Beam Trawl	2	AM W.54374
Serpulidae	*Hyalopomatus* n. sp. 2	IN2022_v08	122	195	Beam Trawl	2	AM W.54394
Serpulidae	*Hyalopomatus* n. sp. 2	IN2022_v08	136	154	Beam Trawl	2	AM W.54367
Serpulidae	*Hyalopomatus* n. sp. 2	IN2022_v08	143	155	Beam Trawl	4	AM W.54378

Family	Species name	Voyage	Operation	Acc. no[1]	Gear	Num	Reg. no.[2]
Serpulidae	*Hyalopomatus* n. sp. 2	IN2022_v08	143	192	Beam Trawl	3	AM W.54385
Serpulidae	*Hyalopomatus* n. sp. 2	IN2022_v08	155	156	Beam Trawl	3	AM W.54377
Serpulidae	*Hyalopomatus* n. sp. 2	IN2022_v08	181	153	Beam Trawl	2	AM W.54392
Serpulidae	*Hyalopomatus* n. sp. 2	IN2022_v08	183	148	Beam Trawl	1	AM W.54369
Serpulidae	*Hyalopomatus* n. sp. 2	IN2022_v08	183	149	Beam Trawl	1	AM W.54372
Serpulidae	*Hyalopomatus* n. sp. 2	IN2022_v08	183	152	Beam Trawl	1	AM W.54376
Serpulidae	*Hyalopomatus* n. sp. 2	IN2022_v08	183	150	Beam Trawl	3	AM W.54398
Serpulidae	*Hyalopomatus* n. sp. 3	IN2022_v08	136	169	Beam Trawl	1	AM W.54366
Serpulidae	*Hyalopomatus* n. sp. 3	IN2022_v08	136	182	Beam Trawl	1	AM W.54438
Serpulidae	*Hyalopomatus*	IN2021_v04	13	131	Beam Trawl	1	AM W.53417
Serpulidae	*Hyalopomatus*	IN2021_v04	31	157	Beam Trawl	1	AM W.53460
Serpulidae	*Hyalopomatus*	IN2021_v04	35	137	Beam Trawl	2	AM W.53468
Serpulidae	*Hyalopomatus*	IN2022_v08	105	202	Beam Trawl	10	AM W.54403
Serpulidae	*Hyalopomatus*	IN2022_v08	122	158	Beam Trawl	6	AM W.54413
Serpulidae	*Hyalopomatus*	IN2022_v08	126	170	Beam Trawl	10	AM W.54476
Serpulidae	*Hyalopomatus*	IN2022_v08	155	155	Beam Trawl	1	AM W.54370
Serpulidae	*Hyalopomatus*	IN2022_v08	159	144	Beam Trawl	1	AM W.54379
Serpulidae	*Neomicrobis* azoricus	IN2022_v08	136	160	Beam Trawl	2	AM W.54375
Serpulidae	*Neomicrobis* azoricus	IN2022_v08	141	186	Beam Trawl	5	AM W.54475
Serpulidae	*Neomicrobis* azoricus	IN2022_v08	161	183-1	Beam Trawl	1	AM W.54338
Serpulidae	*Neomicrobis* azoricus	IN2022_v08	161	183-2	Beam Trawl	1	AM W.54339
Serpulidae	*Neomicrobis* azoricus	IN2022_v08	161	183-3	Beam Trawl	1	AM W.54340
Serpulidae	*Neomicrobis* azoricus	IN2022_v08	161	183-4	Beam Trawl	1	AM W.54341
Serpulidae	*Neomicrobis* azoricus	IN2022_v08	161	183-5	Beam Trawl	1	AM W.54342
Serpulidae	*Neomicrobis* azoricus	IN2022_v08	161	183-6	Beam Trawl	1	AM W.54343
Serpulidae	*Neomicrobis* azoricus	IN2022_v08	161	183-7	Beam Trawl	1	AM W.54344
Serpulidae	*Neomicrobis* azoricus	IN2022_v08	161	182-1	Beam Trawl	1	AM W.54345
Serpulidae	*Neomicrobis* azoricus	IN2022_v08	161	182-2	Beam Trawl	1	AM W.54346
Serpulidae	*Neomicrobis* azoricus	IN2022_v08	161	182-3	Beam Trawl	1	AM W.54347
Serpulidae	*Neomicrobis* azoricus	IN2022_v08	161	182	Beam Trawl	1	AM W.54348
Serpulidae	*Neomicrobis* azoricus	IN2022_v08	161	181	Beam Trawl	20	AM W.54387
Serpulidae	*Neomicrobis* azoricus	IN2022_v08	161	181	Beam Trawl	1	AM W.54439
Serpulidae	*Neomicrobis* azoricus	IN2022_v08	161	181	Beam Trawl	1	AM W.54440
Serpulidae	*Neomicrorbis* azoricus	IN2022_v08	122	158	Beam Trawl	1	AM W.54413
Serpulidae	*Placostegus* n. sp. 1	IN2022_v08	170	138	Beam Trawl	1	AM W.54407
Serpulidae	*Placostegus* n. sp. 1	IN2022_v08	176	132	Beam Trawl	1	AM W.54410
Serpulidae	*Protis* n. sp. 1	IN2021_v04	28	158	Beam Trawl	1	AM W.53456
Serpulidae	*Protis* n. sp. 1	IN2022_v08	120	138	Beam Trawl	1	AM W.54414
Serpulidae	*Protis* n. sp. 1	IN2022_v08	120	149	Beam Trawl	2	AM W.54415
Serpulidae	*Protis* n. sp. 1	IN2022_v08	120	138	Beam Trawl	1	AM W.55291
Serpulidae	*Protis* n. sp. 1	IN2022_v08	120	137	Beam Trawl	15	AM W.55294
Serpulidae	*Protis* n. sp. 1	IN2022_v08	120	153	Beam Trawl	1	AM W.55298
Serpulidae	*Protis* n. sp. 1	IN2022_v08	120	153	Beam Trawl	1	AM W.55299
Serpulidae	*Protis* n. sp. 1	IN2022_v08	143	191	Beam Trawl	1	AM W.54485
Serpulidae	*Protis* n. sp. 2	IN2021_v04	35	136	Beam Trawl	1	AM W.53467
Serpulidae	*Protis* n. sp. 2	IN2021_v04	46	134	Beam Trawl	1	AM W.53480
Serpulidae	*Protis* n. sp. 2	IN2021_v04	46	136	Beam Trawl	1	AM W.53482
Serpulidae	*Protis* n. sp. 2	IN2022_v02	131	170	Beam Trawl	4	AM W.54384
Serpulidae	*Protis* n. sp. 2	IN2022_v08	131	216	Beam Trawl	1	AM W.54382
Serpulidae	*Protis* n. sp. 2	IN2022_v08	155	157	Beam Trawl	1	AM W.54408
Serpulidae	*Protis* sp. 1	IN2022_v08	120	137	Beam Trawl	8	AM W.54411
Serpulidae	*Protis*	IN2022_v08	120	153	Beam Trawl	1	AM W.54412
Serpulidae	*Serpula* sp.	IN2022_v08	170	131	Beam Trawl	1	AM W.54513
Serpulidae	*Serpula* sp.	IN2022_v08	172	161	Beam Trawl	3	AM W.54418
Serpulidae	*Serpula* sp.	IN2022_v08	178	104	Beam Trawl	1	AM W.54397
Serpulidae	*Serpula* sp.	IN2022_v08	179	191	Beam Trawl	1	AM W.54419
Serpulidae	*Serpula* sp.	IN2022_v08	179	166	Beam Trawl	1	AM W.54458
Serpulidae	*Spirobranchus* cf. latiscapus	IN2022_v08	170	111	Beam Trawl	1	AM W.54497

Family	Species name	Voyage	Operation	Acc. no[1]	Gear	Num	Reg. no.[2]
Serpulidae	*Spirobranchus* cf. latiscapus	IN2022_v08	170	133	Beam Trawl	1	AM W.54511
Serpulidae	*Spirobranchus* cf. latiscapus	IN2022_v08	170	132	Beam Trawl	1	AM W.54512
Serpulidae	*Spirobranchus* sp.	IN2022_v08	172	160	Beam Trawl	10	AM W.54416
Serpulidae	*Spirodiscus* sp.	IN2022_v08	103	G	Gandalf net	1	AM W.54450
Serpulidae	*Spirorbinae*	IN2022_v08	184	184	Beam Trawl	10	AM W.54389
Serpulidae	*Vermiliopsis* sp.	IN2022_v08	170	136	Beam Trawl	1	AM W.54507
Serpulidae	*Vermiliopsis*	IN2021_v04	2	118	Beam Trawl	1	AM W.53394
Serpulidae	*Vitreotubus* digeronimoi	IN2022_v08	163	202	Beam Trawl	1	AM W.54402
Serpulidae	*Vitreotubus* digeronimoi	IN2022_v08	163	156	Beam Trawl	1	AM W.54409
Serpulidae	*Vitreotubus* digeronimoi	IN2022_v08	163	156	Beam Trawl	1	AM W.55301
Serpulidae		IN2021_v04	35	135	Beam Trawl	1	AM W.53505
Serpulidae		IN2021_v04	37	117	Beam Trawl	1	AM W.53469
Serpulidae		IN2021_v04	46	144	Beam Trawl	1	AM W.53483
Serpulidae		IN2021_v04	46	145	Beam Trawl	1	AM W.53484
Serpulidae		IN2021_v04	46	146	Beam Trawl	1	AM W.53485
Serpulidae		IN2021_v04	46	147	Beam Trawl	1	AM W.53506
Serpulidae		IN2021_v04	46	148	Beam Trawl	1	AM W.53507
Serpulidae		IN2021_v04	48	141	Beam Trawl	1	AM W.53492
Serpulidae		IN2021_v04	48	142	Beam Trawl	1	AM W.53493
Serpulidae		IN2022_v08	103	G	Gandalf net	2	NMV F310854
Serpulidae		IN2022_v08	115	130	Beam Trawl	2	AM W.54405
Serpulidae		IN2022_v08	117	173	Beam Trawl	1	AM W.54393
Serpulidae		IN2022_v08	122	144	Beam Trawl	2	AM W.54380
Serpulidae		IN2022_v08	122	183	Beam Trawl	1	AM W.54399
Serpulidae		IN2022_v08	126		Beam Trawl	10	AM W.54417
Serpulidae		IN2022_v08	131	167	Beam Trawl	1	AM W.54486
Serpulidae		IN2022_v08	143	208	Beam Trawl	1	AM W.54481
Serpulidae		IN2022_v08	143	209	Beam Trawl	2	AM W.54487
Serpulidae		IN2022_v08	159	135	Beam Trawl	1	AM W.54391
Serpulidae		IN2022_v08	161	161	Beam Trawl	10	AM W.54474
Serpulidae		IN2022_v08	163	186	Beam Trawl	2	AM W.54381
Serpulidae		IN2022_v08	172		Beam Trawl	10	AM W.54421
Serpulidae		IN2022_v08	179	192	Beam Trawl	1	AM W.54644
Serpulidae		IN2022_v08	186	125	Beam Trawl	1	AM W.54406
Serpulidae		IN2022_v08	191	131	Beam Trawl	1	AM W.54484
Siboglinidae		IN2022_v08	111	G	Gandalf net	8	NMV F271121
Sigalionidae		IN2022_v08	120	G	Gandalf net	1	NMV F271126
Sigalionidae		IN2022_v08	128	G	Gandalf net	1	NMV F310779
Sigalionidae		IN2022_v08	128	G	Gandalf net	4	NMV F315419
Sigalionidae		IN2022_v08	131	G	Gandalf net	1	NMV F315406
Sigalionidae		IN2022_v08	151	G	Gandalf net	2	NMV F310793
Sigalionidae		IN2022_v08	157	G	Gandalf net	1	NMV F271334
Sigalionidae		IN2022_v08	161	G	Gandalf net	1	NMV F310828
Sigalionidae		IN2022_v08	161	G	Gandalf net	1	NMV F315413
Sigalionidae		IN2022_v08	163	G	Gandalf net	1	NMV F315228
Sigalionidae		IN2022_v08	165	G	Gandalf net	1	NMV F315229
Sigalionidae		IN2022_v08	193	G	Gandalf net	1	NMV F310890
Sigalionidae		IN2022_v08	196	G	Gandalf net	1	NMV F315236
Sigalionidae	*Pholoides*	IN2022_v08	179	176	Sherman sled	1	AM W.54356
Sigalionidae	*Pisione*	IN2022_v08	161	G	Gandalf net	1	NMV F315414
Sigalionidae	*Pisione*	IN2022_v08	161	G	Gandalf net	1	NMV F315414
Sigalionidae	*Sthenelais*	IN2022_v08	131	G	Gandalf net	1	NMV F315406
Sigalionidae	*Sthenelais*	IN2022_v08	196	G	Gandalf net	1	NMV F315236
Sigalionidae	cf. *Sthenalanella*	IN2022_v08	157	G	Gandalf net	1	NMV F271134
Sigalionidae	cf. *Sthenalanella*	IN2022_v08	165	G	Gandalf net	1	NMV F315229
Sigalionidae		IN2022_v08	120	G	Gandalf net	1	NMV F271126
Sigalionidae		IN2022_v08	128	G	Gandalf net	1	NMV F310779
Sigalionidae		IN2022_v08	128	G	Gandalf net	4	NMV F315419

Family	Species name	Voyage	Operation	Acc. no[1]	Gear	Num	Reg. no.[2]
Sigalionidae		IN2022_v08	151	G	Gandalf net	2	NMV F310793
Sigalionidae		IN2022_v08	161	G	Gandalf net	1	NMV F310828
Sigalionidae		IN2022_v08	161	G	Gandalf net	1	NMV F315413
Sigalionidae		IN2022_v08	163	G	Gandalf net	1	NMV F315228
Sigalionidae		IN2022_v08	193	G	Gandalf net	1	NMV F310890
Sipuncula		IN2022_v08	116	G	Gandalf net	1	NMV F315423
Sipuncula		IN2022_v08	128	G	Gandalf net	1	NMV F315420
Sipuncula		IN2022_v08	131	G	Gandalf net	2	NMV F315408
Sipuncula		IN2022_v08	153	G	Gandalf net	2	NMV F310804
Sipuncula		IN2022_v08	155	G	Gandalf net	1	NMV F310833
Sipuncula		IN2022_v08	181	G	Gandalf net	2	NMV F271113
Syllidae	*Eusyllinae*	IN2022_v08	137	150	Beam trawl	1	AM W.54905
Syllidae	*Syllis* sp. 1	IN2022_v08	141	122	Beam Trawl	1	AM W.54624
Syllidae	*Syllis* sp. 2	IN2022_v08	193	169	Beam Trawl	1	AM W.54459
Syllidae	*Syllis* sp. 3	IN2022_v08	136	149	Beam trawl	1	AM W.54832
Syllidae		IN2022_v08	161	G	Gandalf net	4	NMV F315416
Syllidae		IN2022_v08	196	G	Gandalf net	2	NMV F271118
Terebellidae	*Eupolymnia* n. sp. 2	IN2022_v08	126	148	Beam Trawl	1	AM W.54482
Terebellidae	*Eupolymnia* n. sp. 2	IN2022_v08	126	149	Beam Trawl	1	AM W.54489
Terebellidae	*Eupolymnia* n. sp. 2	IN2022_v08	126	182	Beam Trawl	1	AM W.54628
Terebellidae	*Eupolymnia* n. sp. 2	IN2022_v08	138	148	Beam Trawl	1	AM W.54638
Terebellidae	*Eupolymnia* n. sp. 2	IN2022_v08	138	147	Beam Trawl	1	AM W.54833
Terebellidae	*Eupolymnia* sp.	IN2022_v08	161	179	Beam Trawl	1	AM W.54667
Terebellidae	*Eupolymnia* sp. 1	IN2022_v08	126	185	Beam Trawl	7	AM W.54478
Terebellidae	*Nicolea* n. sp. 1	IN2022_v08	126	111	Beam Trawl	1	AM W.54515
Terebellidae	*Nicolea* n. sp. 1	IN2022_v08	193	123	Beam Trawl	1	AM W.54840
Terebellidae	*Nicolea* n. sp. 2	IN2022_v08	193	127	Beam Trawl	1	AM W.54629
Terebellidae	*Nicolea* n. sp. 2	IN2022_v08	193	126	Beam Trawl	1	AM W.54639
Terebellidae	*Nicolea*	IN2022_v08	176	133	Beam Trawl	1	AM W.54640
Terebellidae	*Terebella* sp.	IN2022_v08	126	185	Beam Trawl	1	AM W.54479
Terebellidae		IN2021_v04	7	135	Beam Trawl	1	AM W.53405
Terebellidae		IN2021_v04	22	119	Beam Trawl	1	AM W.53422
Terebellidae		IN2021_v04	37	147	Beam Trawl	1	AM W.53473
Terebellidae		IN2021_v04	48	126	Beam Trawl	2	AM W.53487
Terebellidae		IN2022_v08	108	150	Beam Trawl	1	AM W.54626
Terebellidae		IN2022_v08	159	136	Beam Trawl	1	AM W.54666
Terebellidae		IN2022_v08	161	147	Beam Trawl	1	AM W.54642
Tomopteridae	*Tomopteris*	IN2022_v08	116	G	Gandalf net	1	NMV F310862
Tomopteridae	*Tomopteris*	IN2022_v08	116	G	Gandalf net	1	NMV F315212
Tomopteridae	*Tomopteris*	IN2022_v08	117	G	Gandalf net	2	NMV F310762
Tomopteridae	*Tomopteris*	IN2022_v08	126	G	Gandalf net	7	NMV F310840
Tomopteridae	*Tomopteris*	IN2022_v08	136	G	Gandalf net	6	NMV F310905
Tomopteridae	*Tomopteris*	IN2022_v08	138	G	Gandalf net	3	NMV F310873
Tomopteridae	*Tomopteris*	IN2022_v08	141	G	Gandalf net	1	NMV F271107
Tomopteridae	*Tomopteris*	IN2022_v08	141	G	Gandalf net	3	NMV F310913
Tomopteridae	*Tomopteris*	IN2022_v08	143	G	Gandalf net	1	NMV F315220
Tomopteridae	*Tomopteris*	IN2022_v08	145	G	Gandalf net	2	NMV F310757
Tomopteridae	*Tomopteris*	IN2022_v08	149	G	Gandalf net	2	NMV F310920
Tomopteridae	*Tomopteris*	IN2022_v08	149	G	Gandalf net	1	NMV F315223
Tomopteridae	*Tomopteris*	IN2022_v08	167	G	Gandalf net	1	NMV F310809
Tomopteridae	*Tomopteris*	IN2022_v08	185	G	Gandalf net	1	NMV F315231
Tomopteridae	*Tomopteris*	IN2022_v08	191	G	Gandalf net	1	NMV F310897
Tomopteridae	*Tomopteris*	IN2022_v08	195	G	Gandalf net	2	NMV F310885
Tomopteridae	*Tomopteris*	IN2022_v08	195	G	Gandalf net	1	NMV F315235
Tomopteridae	*Tomopteris*	IN2022_v08	111	G	Gandalf net	2	NMV F271122
Tomopteridae	*Tomopteris*	IN2022_v08	113	G	Gandalf net	1	NMV F271130
Tomopteridae	*Tomopteris*	IN2022_v08	116	G	Gandalf net	1	NMV F310862
Tomopteridae	*Tomopteris*	IN2022_v08	116	G	Gandalf net	1	NMV F315212

Family	Species name	Voyage	Operation	Acc. no[1]	Gear	Num	Reg. no.[2]
Tomopteridae	*Tomopteris*	IN2022_v08	117	G	Gandalf net	2	NMV F310762
Tomopteridae	*Tomopteris*	IN2022_v08	126	G	Gandalf net	1	NMV F271129
Tomopteridae	*Tomopteris*	IN2022_v08	126	G	Gandalf net	7	NMV F310840
Tomopteridae	*Tomopteris*	IN2022_v08	136	G	Gandalf net	6	NMV F310905
Tomopteridae	*Tomopteris*	IN2022_v08	136	G	Gandalf net	2	NMV F315219
Tomopteridae	*Tomopteris*	IN2022_v08	138	G	Gandalf net	3	NMV F310873
Tomopteridae	*Tomopteris*	IN2022_v08	141	G	Gandalf net	1	NMV F271107
Tomopteridae	*Tomopteris*	IN2022_v08	141	G	Gandalf net	3	NMV F310913
Tomopteridae	*Tomopteris*	IN2022_v08	143	G	Gandalf net	1	NMV F315220
Tomopteridae	*Tomopteris*	IN2022_v08	145	G	Gandalf net	2	NMV F310757
Tomopteridae	*Tomopteris*	IN2022_v08	149	G	Gandalf net	2	NMV F310920
Tomopteridae	*Tomopteris*	IN2022_v08	149	G	Gandalf net	1	NMV F315223
Tomopteridae	*Tomopteris*	IN2022_v08	167	G	Gandalf net	1	NMV F310809
Tomopteridae	*Tomopteris*	IN2022_v08	185	G	Gandalf net	1	NMV F315231
Tomopteridae	*Tomopteris*	IN2022_v08	191	G	Gandalf net	1	NMV F310897
Tomopteridae	*Tomopteris*	IN2022_v08	195	G	Gandalf net	2	NMV F310885
Tomopteridae	*Tomopteris*	IN2022_v08	195	G	Gandalf net	1	NMV F315235
Tomopteridae		IN2022_v08	111	G	Gandalf net	2	NMV F271122
Tomopteridae		IN2022_v08	113	G	Gandalf net	1	NMV F271130
Tomopteridae		IN2022_v08	126	G	Gandalf net	1	NMV F271129
Tomopteridae		IN2022_v08	136	G	Gandalf net	2	NMV F315219
Typhloscolecidae		IN2022_v08	113	G	Gandalf net	1	NMV F310851
Typhloscolecidae		IN2022_v08	136	G	Gandalf net	1	NMV F310909
Typhloscolecidae		IN2022_v08	113	G	Gandalf net	1	NMV F310851
Typhloscolecidae		IN2022_v08	136	G	Gandalf net	1	NMV F310909

[1] Gandalf net samples not sorted onboard and did not have accession numbers allocated; [2] AM - Australian Museum, Sydney; NMV - Museums Victoria, Melbourne; [3] split lot, new number to be allocated